Schedule of Conservation Works

St Luke's Grammar School (SSD-10291)

800 Pittwater Road, Dee Why and 210 & 224 Headland Road, North Curl Curl NSW 2099

Submitted to Minister for Planning and Public Spaces
On Behalf of St Luke's Grammar School & EPM Projects

AUGUST 2024

REPORT REVISION HISTORY

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This report has been reviewed and approved for issue in accordance with City Plan's quality assurance policy and procedures.

Acknowledgement of Country

City Plan acknowledges the First Nations Peoples upon whose lands and waters we live and work, we respect their cultural heritage and continuing connection to Country and thank them for protecting the coastline and its ecosystems through time. We acknowledge that sovereignty over these lands and waters has never been ceded and extend our respect to Elders past, present and emerging.

We proudly operate from the lands of the Gadigal, Darkinyung, Danggan Balun and Turrbal Peoples.

TABLE OF CONTENTS

1. Introduction 5
1.1. Background 5
1.2. Site Location 6
1.3. Heritage Listing 6
1.4. Methodology and Terminology 7
1.5. Limitations 7
1.6. Author Identification 8
2. Understanding the Place 9
2.1. Abbreviated History 9
2.2. Statement of Significance 10
2.2.1. Warringah LEP 2011 listings of the subject site from the State Heritage Inventory 10
2.2.2. Warringah LEP 2011 listings of heritage items proximal to the subject site from the State Heritage Inventory 10
2.3. The Structure and Condition 10
2.3.1. Description of the Setting 10
2.3.2. Description of the Buildings as found 11
3. Conservation Approach 12
3.1. Preliminary and General 12
3.1.1. Construction Manager 12
3.1.2. Investigation and opening up works 12
3.1.3. Execution of the works 12
3.1.4. Suitably Experienced Contractors 13
3.1.5. Inspections 13
3.1.6. Damages 13
3.1.7. Variations 13
3.1.8. Careful Approach 13
3.1.9. Hazardous materials 14
3.2. Conservation Methodology Notes 15
3.2.1. New fabric 15
3.2.2. Patching and infill 15
3.2.3. Rising and falling damp 15
3.2.4. Masonry 15
3.2.5. Paints and finish coats 16
3.2.6. Roofer and plumber 16
3.2.7. Metal worker 17

3.2.8. Carpentry and joinery 17
3.2.9. Doors and windows 18
3.2.10. Glazier 18
3.2.11. Plaster finishes 18
3.2.12. Services 18
3.2.13. Scaffolding 18
3.2.14. Landscape 18
3.3. Implementation of Conservation Works 19
3.3.1. Setting 20
3.3.2. Former Wormald Building: Exterior 21
3.3.3. Former Wormald Building: Interior 24
4. Appendices 27
4.1. Photographs (CPH, 17 July 2024) 27

FIGURES

Figure 1: Cadastral map showing the subject site 6
Figure 2: Cadastral map showing the 'Former Wormald Building (front entrance, tower and curved former canteen only)' ((item no. I49) 7
Figure 3: Western façade of the subject building at 800 Pittwater Road 27
Figure 4: Western façade of the subject building with front entrance and tower 27
Figure 5: Clock tower (heritage fabric) at the former Wormald Building 27
Figure 6: Former curved canteen (heritage fabric) at the former Wormald Building 27
Figure 7: Former curved canteen (heritage fabric) at the former Wormald Building 28
Figure 8: Western elevation of the subject building containing a flat overhanging roof 28
Figure 9: Open carpark located to the north of the subject site 28
Figure 10: Existing café and seating area in the existing former canteen. 28
Figure 11: General view of the entrance lobby leading to the reception for the gym. 28
Figure 12: General view of the entrance lobby leading to the reception for the gym. 28
Figure 13: Timber deck at the terrace of Clock Tower. 29
Figure 14: Timber deck at the terrace of Clock Tower. 29
Figure 15: Timber staircase in the Clock Tower. 29
Figure 16: General view of the Clock Tower. 29
Figure 17: Corner window in the Clock Tower. 29
Figure 18: General view of the Clock Tower. 29
Figure 19: Existing circular window in the staircase corridor for Clock Tower. 30
Figure 20: Entrance to the staircase corridor for Clock Tower. 30

Figure 21: Staircase corridor leading to the Clock Tower. 30
Figure 22: Staircase corridor leading to the Clock Tower. 30

1. INTRODUCTION

1.1. Background

City Plan Heritage (CPH) has been engaged by EPM Projects Pty Ltd on behalf of St Luke's Grammar School to provide built heritage consultancy services in relation to the state significant development (SSD) for a new Senior School Campus for years 10 to 12 at 800 Pittwater Road, Dee Why and 210 & 224 Headland Road, North Curl Curl NSW 2099 (subject site).

The development includes the following works:

Expansion of St Luke's Grammar School to two new sites comprising:

- *site preparation works involving staged demolition, tree removal, earthworks and removal of tenancy fit-outs within the existing buildings;*
- *alterations, additions and the adaptive re-use of the existing building at 224 Headland Road, North Curl Curl for the purpose of a school Sports Centre, incorporating:*
  - *two full-size and one half-size basketball courts, dance and exercise space; school uniform shop, storage, staff and student amenities;*
  - *connection comprising lift and stairs to 800 Pittwater Road;*
  - *a new lift, new roof and truss system; and*
  - *landscaping, car parking and signage.*
- *alterations, additions and the adaptive re-use of the existing building at 800 Pittwater Road, Dee Why for the purpose of a new Senior School campus,, incorporating:*
  - *demolition, internal alterations, and part two to four storey addition with a new roof;*
  - *general learning areas, administration, café and speciality learning areas;*
  - *an indoor swimming pool and outdoor sports courts, performing arts / assembly theatres;*
  - *extension and reconfiguration of the existing basement carpark, bicycle parking, mechanical plant and storage;*
  - *retention and restoration of the existing heritage elements; o connection comprising lift and stairs to 224 Headland Road; and*
  - *circulation areas, landscaping, new substation, signage and an acoustic wall.*
- *construction works in three stages; and*
- *staged increase in student numbers comprising a maximum of 1600 students.*

This schedule of conservation works has been developed in response to conditions C11, C12 and C13 in accordance with the development consent for application no. SSD-10291 by the Minister for Planning and Public Spaces under Section 4.38 of the *Environmental Planning and Assessment Act 1979 (NSW)* on 19 April 2023.

Heritage

C11. Prior to the commencement of any construction at the Pittwater Road site, the heritage consultant engaged to work with the project team under condition A44 must develop a Schedule of Conservation Works that identifies the works required to remedy issues identified, as well as guide repairs, restoration or reconstruction.

C12. The Schedule of Conservation Works referred to in condition C11 and including the paint scheme for the Former Wormald Building at 800 Pittwater Road, Dee Why, must be prepared in accordance with the NSW Environment and Heritage Group's technical guides for conserving, repairing and using heritage items and in consultation with Council's Heritage Advisor.

C13. The Schedule of Conservation Works referred to in condition C11 must be submitted to the Planning Secretary for approval and a copy provided to the Certifier and Council's Heritage Advisor for information.

This schedule of conservation works aims to provide detailed steps to ensure that the identified heritage fabric of the subject site is appropriately addressed during the current works programme.

1.2. Site Location

The subject site is accessed from 800 Pittwater Road (Figure 1). The subject site is bounded by the 'Stony Range Flora Reserve' HCA (C6) (north), Pittwater Road (north-west), Harbord Road (west), Headland Road and properties at 226, 228 and 275 Harbord Road (south-west) and St Luke's Grammar School (east).

The Sydney central business district (CBD) is located approximately 14.5 km to the south-west of the subject site. For a more detailed description of the site and its context, see *Section 2 - Understanding the Place.*

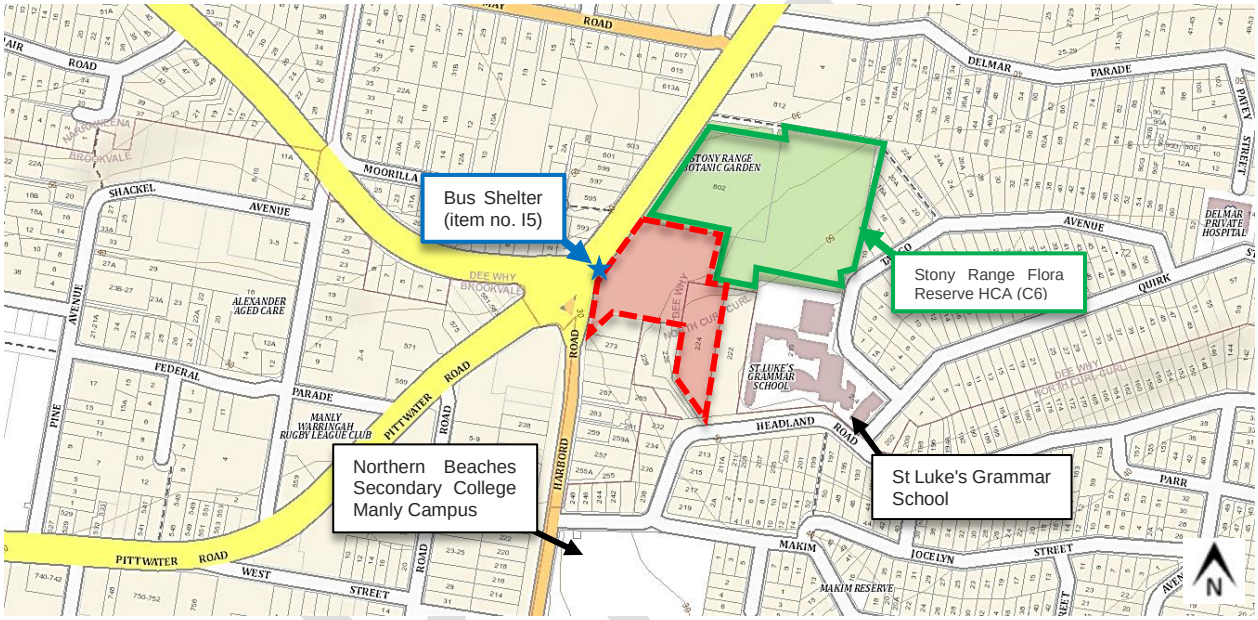

Figure 1: Cadastral map showing the subject site (indicated in red) in relation to the 'Stony Range Flora Reserve' HCA (C6) to the north-east and the 'Bus Shelter' (item no. I5) to the west (Source: SIX Maps).

1.3. Heritage Listing

The subject site includes the local heritage item listed under Part 1, Schedule 5 of the *Warringah Local Environmental Plan (LEP) 2011* as 'Former Wormald Building (front entrance, tower and curved former canteen only)', located at 800 Pittwater Road (item no. I49).

The subject site is also located in proximity to the following heritage items:

Environmental Planning and Assessment Act, 1979
Warringah Local Environmental Plan (LEP) 2011
Part 1 Heritage items ▪ 'Bus Shelter', 800 Pittwater Road, item no. I5 **Part 2 Heritage conservation areas** ▪ 'Stony Range Flora Reserve', 802 Pittwater Road, C6

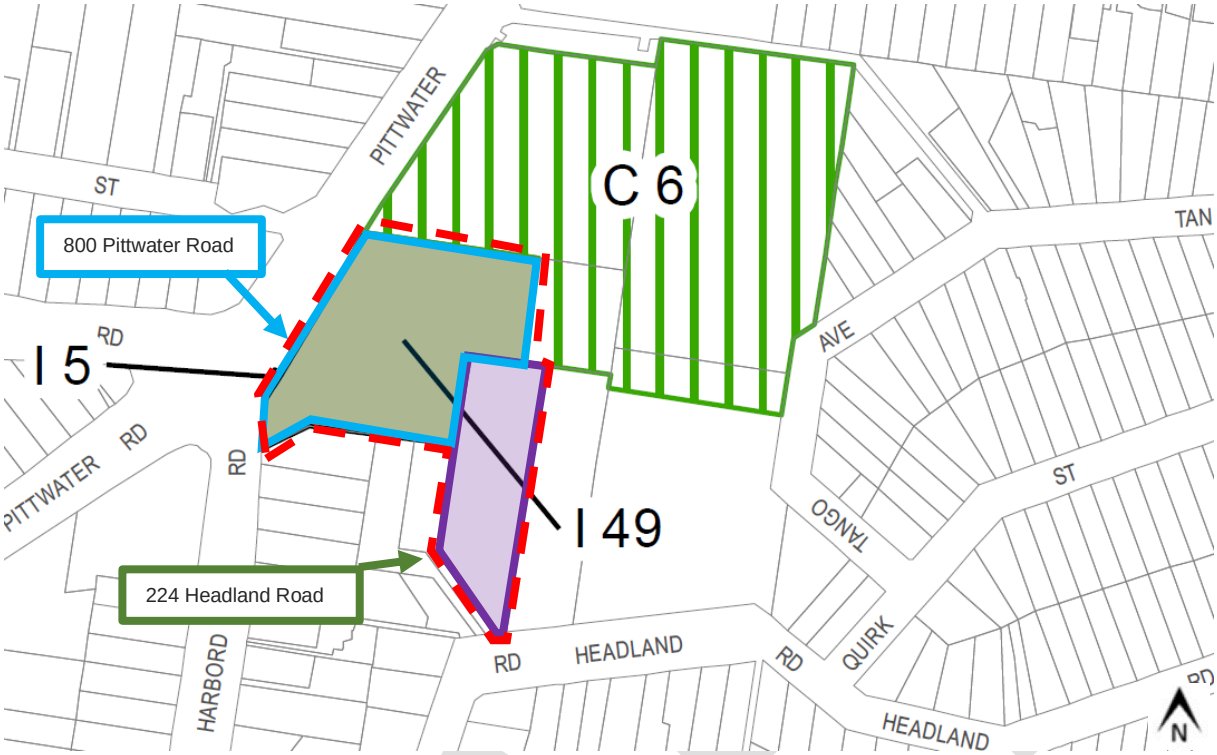

Figure 2: Cadastral map showing the 'Former Wormald Building (front entrance, tower and curved former canteen only)' ((item no. I49) in relation to the approximate location of the subject site (indicated in red). Proximal heritage items 'bus shelter' (item no. I5) and the 'Stony Range Flora Reserve' HCA (item no. C6) are also visible) (Source: Warringah LEP 2011, Heritage Map 10A).

1.4. Methodology and Terminology

This schedule of conservation works draws on "The Heritage Maintenance Guides: Technical guides for conserving, repairing and using heritage items" prepared by Heritage NSW, NSW Department of Planning and Environment.

The terms *fabric, place, preservation, reconstruction, restoration, adaptation, conservation,* and *interpretation* used throughout this report have the meaning given them in Australia ICOMOS Charter for Places of Cultural Significance ('Burra Charter') 2013.

Site survey

A visual site and fabric survey of the subject site was carried out by Kerime Danis (Director- Heritage) and Asmita Bhasin (Heritage Consultant) on 17 July 2024 with the purpose of photographing and understanding the condition of the place. All results are presented in *Section 3 - Conservation Approach*

1.5. Limitations

- Inspections of the subject site were limited to visual inspections of the former Wormald Building's front entrance, tower and curved former canteen area as well as the surroundings, including the bus shelter at Pittwater Road. No roof spaces were inspected, except the roof of the tower. No building fabric was disturbed or removed to inspect concealed areas. Sub-floor areas were not inspected.
- Accurate measured drawings do not form part of this schedule of conservation works.
- This schedule of conservation works relates only to SSD-10291. Should any further development applications that implicate heritage fabric at the subject site be made, a new schedule of conservation works should be prepared.
- This schedule of works only relates to significant areas affected by the works and included at *Section 3.3 - Implementation of Conservation Works.* It does not address any additional works.

1.6. Author Identification

The following report has been prepared by Asmita Bhasin - Heritage Consultant (BArch, MUrbanism (HeritCons), MICOMOS), with input from Carole-Lynne Kerrigan - Associate Director (MCultHeritage, BA (Cultural Heritage & Museums/Anthropology), MICOMOS). Kerime Danis: Director - Heritage (BArch, MHeritCons (Hons), Associate RAIA, M.ICOMOS, ICOMOS AdCom) has reviewed and endorsed this report.

2. UNDERSTANDING THE PLACE

2.1. Abbreviated History

The following table provides a summary of the history of the subject site that has been extracted in full from the Heritage Impact Statement for St Luke's Grammar School at 800 Pittwater Road, Dee Why prepared by CPH in November 2019.

Table 1: Chronological history of the subject site.

Date	Event
Pre-1788	Dee Why was, and continues to be, part of the traditional land of the Aboriginal people we have come to call the Guringai.
1826	Old Pittwater Road (now Pittwater Road) was constructed by James Jenkins with the aid of convict labourers
1831	James Wheeler purchased 90 hectares including the subject sites, with Mathew Charlton similarly occupying part of the area to the south.
1881 - 1886	Subject sites subdivided into Lots 367 - 371, with Lot 369 set aside for 'public reservation'
1886	Jane Malcolm occupied Lots 370 and 371
1914	Lot 368 subdivided into Lots 368 and 2112
1927	F.J Sargood and William Garddiner merged businesses to create Sargood Gardiner Ltd, soon opening offices in every Australian state
1940s	Previous office and warehouse sold with the intention to build a new factory at the subject site
1949 - 1951	First factory opens at the subject site to provide a 'worker-friendly' warehouse for Top Dog Men's Wear designed by Spencer, Spencer & Bloomfield
1957	Top Dog products ceased production and the factory building was sold to Bonds The Stony Range Regional Botanic Garden was established north of the subject sites, previously the site of the Dee Why Hill (also known as 'Cable Hill') quarry
1958 - 1972	The factory remained under the ownership of Bonds
1970s - 1990s	Factory owned by Wormald International until its sale and internal subdivision to accommodate a gymnasium
1993 - 1997	Building saw major additions and alterations with only the tower and façade retained (BA5001/4631, BA5002/1066, BA5002/1201, BA5002/3003 and BA5002/4407)
2008	Additions and alterations to the interior of the gymnasium (DA2008/1535 and CC2008/1201)
2009	New internal fitout installed to accommodate the existing medical centre (DA2009/1421)
2011	Further additions and alterations undertaken related to installation of the existing Officeworks (DA2010/1836)
2013	Subject sites purchased by St Luke's Grammar School
2014 - 2019	Minor works carried out to interior of the gymnasium and extension of operating hours (DA2017/0881, CDC2014/0302 and CDC2018/1211).

2.2. Statement of Significance

2.2.1. Warringah LEP 2011 listings of the subject site from the State Heritage Inventory

'Former Wormald Building (front entrance, tower and curved former canteen only)

'Former Wormald Building (front entrance, tower and curved former canteen only)' (item no. I49) is listed on the Warringah LEP 2011 under the following two criteria: Criterion a) Historical significance, and Criterion c) Representativeness.

Statement of Heritage Significance

The following statement of significance has been extracted in full from the SHI form:

> *An excellent representative & relatively rare example of early post-war factory architecture. Displays high creative & technical integrity. Historically evidence of the growth of industry in the area. Socially, a landmark which many local people worked in.*[1]

2.2.2. Warringah LEP 2011 listings of heritage items proximal to the subject site from the State Heritage Inventory

The following table provides a list of items in proximity to the subject site and, where available, the relevant statement of significance.

Heritage Item	Statement of Significance
'Bus Shelter' (Item no. I5)	*An excellent representative & rare example of a transport shelter in the post-war international style. Designed specifically to complement the adjacent factory & built by the company. Socially important as an e.g. of facilities provided for employees.*[2]
'Stony Range Flora Reserve' (HCA C6)	*The Stony Range Flora and Fauna Reserve has a high degree of local significance for growing a wide range of native flora, mostly endemic to the Sydney Region, and for contributing to community awareness of them. It is a skilfully and aesthetically designed, laid out and planted cultural landscape which has a combination of scientific, research and educational functions which are much valued by the community, both local and regional.*[3]

2.3. The Structure and Condition

The following descriptions present a summary of the current condition of the site and the buildings. For ease of reference limited supporting images are provided at Appendix 1.

2.3.1. Description of the Setting

The subject site is located in Dee Why, a suburb within the Northern Beaches local government area (LGA) approximately 14.5 km north-east of the Sydney CBD. The subject site is approximately 1.7 km west of Dee Why Beach.

The subject site is bounded by the 'Stony Range Flora Reserve' HCA (C6) (north), Pittwater Road (north-west), Harbord Road (west), Headland Road and properties at 226, 228 and 275 Harbord Road (south-

[1] 'Former Wormald Building (front entrance, tower and curved former canteen only)', heritage item ID 2610055, State Heritage Inventory (SHI) form, accessed via https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2610055
[2] 'Bus Shelter', heritage item ID 2610056, State Heritage Inventory (SHI) form, accessed via https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2610056
[3] 'Stone Range Flora Reserve Conservation Area', heritage item ID 2610089, State Heritage Inventory (SHI) form, accessed via https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2610089

west) and St Luke's Grammar School (east). The subject site is situated on the eastern side of Pittwater Road, north of the intersection with Warringah and Harbord Roads.

The current extent of St Luke's Grammar School (lot 210 Headland Road, including 2 - 4 Tango Avenue) includes a dual campus to accommodate students in kindergarten to year 12. It includes a multi-purpose hall, administration office, library resource centre, four-storey multi-purpose centre with basketball and tennis courts, class and function rooms, green areas and a two-storey car-park. St Luke's Grammar School is bounded by Headland Road (south), Quirk Street (south-east), and Tango Avenue (east).

Heritage item 'Bus Shelter' (item no. I5) is situated to the west of the subject site on Pittwater Road. It is a cement rendered Post-War International style structure with a skillion roof constructed in c. 1949.[4] It is set into the rock retaining wall that separates the subject site from Pittwater Road and has been constructed in the same style as the building on the subject site.

The 'Stony Range Flora Reserve' HCA (C6), to the north of the subject site, is a '*skilfully and aesthetically designed, laid out and planted cultural landscape which has a combination of scientific, research and educational functions...*[5] The site consists of approximately 3.6 hectares of fenced bushland and contains a caretaker's cottage, meeting hall, shade houses, nursery compound and garage, with stone and gravel paths leading throughout. The Reserve has developed as a rainforest since the 1950s with several species of ferns and palms including Cedar and Coachwood.[6]

2.3.2. Description of the Buildings as found

The subject building is an example of 'post-war factory architecture', with light-coloured rendered masonry walls and a prominent off-centre clocktower. The building 'steps up' to the east, in unison with the topography, with 3-4 storeys at the Pittwater frontage and a single-storey warehouse at the rear, which currently houses 'Officeworks'.

Entrance to the building is gained from the Pittwater frontage (western façade). The northern-most entry provides access to the Fitness First gym via a set of steps and the southern entrance provides access to Officeworks, which is accessed directly from the ground level via the carpark. An undercover carpark is also accessible from the south with an exit located at the south-western corner.

The Pittwater frontage (western façade) comprises a flat, overhanging roof. Beyond the Pittwater frontage (western façade) the building steps up gradually in relation to the site contours. The northern and southern facades are similar in style, featuring the same aluminium-framed windows. The northern façade is unique and includes a curved 'former canteen' fitted with windows of the same design.

The tower is located in the northern half of the subject building. The tower is comprised of the same rendered masonry finish as the northern (Fitness First) entrance, with a large clock face on the western façade. Steel-framed windows bound the south-western corner.

Clock Tower

The interior of the clock tower is accessed through the Fitness First reception area. Corner windows provide views from the second and third floors. A timber staircase affixed to the walls provides access to the roof of the clock tower. The second and third floor of the clock tower feature exposed concrete and surface mounted conduits. Walls are graffitied in some sections.

The roof to the clock tower is comprised of an open area with a wooden viewing platform. The roof provides views toward 224 Headland Road to the south-east and Pittwater Road to the west.

[4] 'Bus Shelter', heritage item ID 2610056, State Heritage Inventory (SHI) form, accessed via https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2610056
[5] 'Stone Range Flora Reserve Conservation Area', heritage item ID 2610089, State Heritage Inventory (SHI) form, accessed via https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2610089
[6] Ibid.

3. CONSERVATION APPROACH

For ease of reference this section has been divided into three parts. *Section 3.1* provides *Preliminary and General* requirements and *section 3.2* includes the *Conservation Methodology Notes* that have been prepared as a guideline to support the implementation of the site-specific works identified at *section 3.3 - Implementation of Conservation Works*. The purpose of these works is not to remove the patina or the blemishes of age, nor to attain perfection of detail or finishes. All conservation works should be read in conjunction with the relevant architectural and engineering documentation.

Where reference is made to works being completed to a “built heritage specialist's approval", it is required that areas, or samples, are prepared and the outcome reviewed with the appropriately qualified built heritage specialist on site prior to proceeding with any of the conservation works affecting the subject trade or area.

3.1. Preliminary and General

3.1.1. Construction Manager

Contractors and tradesmen are to be advised of the heritage status and significance of its fabric prior to undertaking works to the former Wormald Building (limited to front entrance, tower and curved former canteen only) and its immediate setting.

Contractors involved in the works are to make workmen and sub-contractors aware that the building and its immediate setting contain a structure and ornamental features that are old, fragile, and are held in high esteem by the community.

3.1.2. Investigation and opening up works

All works can be undertaken by a suitably experienced specialist contractor following approval from the consent authority. Works are to be carried out carefully and systematically with minimal vibration and strictly in accordance with methodologies approved by the built heritage specialist. Ensure that heritage fabric is not damaged during the works.

Where appropriate, works are to be monitored during any opening-up phase to determine the extent and nature of the works. Any cost estimate based on this schedule should contain a substantial contingency provision for the preparation of specifications and additional work.

Where reference is made to works being completed to a “built heritage specialist's approval", it is required that areas, or samples, are prepared and the outcome reviewed with the appropriately qualified built heritage specialist on site prior to proceeding with any of the conservation works affecting the subject trade or area.

3.1.3. Execution of the works

The works shall be executed in a first-class manner to the true intent and meaning of the construction drawings, specifications and site instructions. Material and construction techniques shall comply fully with the relevant building codes and the nature of the original materials and construction techniques employed at the subject former Wormald Building. All new materials are to be defect free except where salvaged materials are approved for use by the built heritage specialist.

The built heritage specialist is to be involved in the resolution of all matters where existing heritage fabric and spaces are subject to salvage, preservation, restoration, reconstruction, recording and demolition.

Discrepancies between the drawings and the specifications shall immediately be brought to the attention of the architect and built heritage specialist for direction and clarification before proceeding with the relevant portion of the works.

Under the guidance of the built heritage specialist, temporary protection measures are to be put in place to reduce the potential for damage to the subject former Wormald Building during physical works. Any damage to heritage fabric shall be fully restored prior to the issue of an Occupation Certificate.

3.1.4. Suitably Experienced Contractors

All works are to be carried out by companies or individuals with suitable conservation experience and knowledge of relevant building skills and materials. The built heritage specialist is able to assist in verification of potential team members prior to commissioning.

Input from a Structural Engineer experienced in the conservation and repair of heritage structures/buildings is to be provided, where necessary. This is to involve the assessment of all methodologies to do with the works, the phasing of the works and all measures to support the structure/fabric which is to remain.

3.1.5. Inspections

To facilitate the necessary inspections, the contractor shall provide a construction programme to the built heritage specialist at the commencement of the works. The contractor and sub-contractors shall allow, co-operate and facilitate the inspection of the works by the built heritage specialist and Council's Heritage Advisor at agreed intervals and in accordance with the work programme. Ensure appropriate notification of minimum 24 hours is provided for unforeseen inspections.

The project manager shall provide all SSD approved drawings and related specifications, and any subsequent modifications of this documentation, to the built heritage specialist.

3.1.6. Damages

The contractor shall ensure that all people carrying out works at the subject former Wormald Building are aware of the heritage status of the place. The contractor shall be responsible for all damage caused by anyone for whom the contractor is responsible.

3.1.7. Variations

The contractor shall not depart from the specifications provided in *Section 3.2 - Conservation Methodology Notes* or use alternative details and materials unless approved by the built heritage specialist.

3.1.8. Careful Approach

Recording

If heritage fabric is required to be removed temporarily during the works, the contractor must facilitate accurate recording by the built heritage specialist, prior to removal. Accurate recording should be undertaken by way of measured drawings and/or photographs to assist in its reinstatement in its original location and configuration.

Retention of Fabric

Conservation works should aim to retain as much heritage fabric as possible.

Preference should be given to the retention and repair of heritage fabric over the complete replacement of a material or building element.

Protection of surfaces and items in areas of work

- Generally, protect property that is to remain on or adjacent to the site from interference or damage. Make good any such damage to match existing.
- Where work is being undertaken to heritage fabric or fabric that is adjacent to heritage fabric, care should be taken to prevent damage. Heritage fabric that is at risk of damage as a result of the works should be secured and protected prior to the commencement of works.
- Protection measures are to be installed in a manner that does not damage, stain or otherwise mark any of the existing fabric.
- Ensure the existing structure is at all times maintained in a waterproof condition during the carrying out of the works. Contractors shall accept the responsibility for any damage resulting

from the failure to prevent water entry and reinstate damaged building fabric and contents at no variation to the contract sum.

3.1.9. Hazardous materials

An Asbestos Register and Management Plan was prepared by KPMG SGA Property Consultancy Pty Ltd that carried out laboratory testing identifying two out of nine samples where Chrysotile asbestos was detected.

Removal of hazardous materials is to be carried out and disposal should be consistent with statutory requirements.

3.2. Conservation Methodology Notes

3.2.1. New fabric

Whenever modifications are made to the structures/spaces ensure:

- New materials for making good heritage fabric are to match the original materials in terms of colours, finishes, sizes, profile and materials.
- All new fixing methods are to be reversible, allowing for the later removal, repair or refixing of the item or material without damaging the surrounding fabric.
- When fixing a new item or material to significant fabric, choose a location and method that will be easily repaired, or disguised, should it be removed later. Use the same fixing methods as the original and, where possible, use earlier fixing points rather than creating new ones.
- New fixing points to be in locations that ensure there will be no damage to significant fabric.

3.2.2. Patching and infill

- Replacement of loose, deteriorated or damaged material, or inappropriate previous repairs, is to be under the guidance of the built heritage specialist.
- Patch repair where necessary and make good to match the existing adjacent material. Where possible, use salvaged material. Finish accordingly under the guidance of the built heritage specialist.
- Repair surface cracking where necessary and make good to match the existing adjacent material. Finish accordingly under the guidance of the built heritage specialist.
- Ensure new work is easily, but subtly, identifiable as such. The built heritage specialist can assist with suitable solutions.

3.2.3. Rising and falling damp

- Rising and falling damp is evident and should be resolved prior to carrying out remedial works or applying finish coatings. During investigative works the following steps should be employed:
  - Inspect the roof, rainwater goods, flashings, door and window openings, ground levels and the presence of a damp-proof course (DPC) to determine the source of water ingress. Specialist advice may be required to ensure an accurate diagnosis.
  - Following diagnosis, appropriate measures should be taken to eliminate the cause of the water ingress and/or damp.
  - Following rectification, monitor the area to ensure that the problems have been resolved and that the surfaces are dry before applying final finishes. Continue monitoring for signs of recurring, or new, problems.
- The following may assist in rectifying the cause of damp:
  - Ensure site drainage is adequate and that water does not pond against the base of the walls. Re-grading and resurfacing may be necessary.
  - Ensure downpipes properly discharge into gully traps or rainwater heads, and that stormwater is carried away from the structure.
  - Fix leaks, repair or replace roof elements.
  - Clear gutters, downpipes and gully traps.
  - Improve subfloor ventilation.

3.2.4. Masonry

Renders

- Patch repair damaged and missing render across the exterior of the building especially the hood of the curved former canteen wing.

- Remove rust from the exposed reinforcement steel bars using a wire brush scrubbing in a circular motion. Scrape away rust and other forms of corrosion until revealing the clean steel underneath. To use a wire brush, simply hold the brush against the rusted area and scrub.
- After the rust is removed, it's important to protect the steel bars from rusting again. Apply a coat of rust inhibitor or paint to provide a barrier against moisture and other elements that can cause rust.
- Patch repair the rendered masonry walls through using a mixture of 6:1:1 ratio of sand, cement, and lime for all external wall rendering.

3.2.5. Paints and finish coats

- All painting to be carried out in consultation with, and to the approval of, the built heritage specialist and Northern Beaches Council's Heritage Advisor.
- All surfaces require surface treatment as general maintenance. Application of finish coats to be in accordance with manufacturer's specifications and following appropriate surface preparation.
- Application of finish coats should occur following rectification of identified rising and falling damp problems.
- Do not coat old walls with water repellents or other products to seal them because the coating will trap moisture and cause damage.
- When required, repaint in the same colour to match existing (or in the approved colour scheme) and in accordance with manufacturer's specifications. To ensure continuity of colours, paint entire elements or surfaces. Do not 'touch up' small areas. Do not paint previously unpainted surfaces.
- All surfaces not being painted should be covered in tarpaulin o cloth to prevent staining during the painting process.

Painting of Metals

- Metals are to be cleaned using wire brushing, grit blasting, acid pickling or solvents. Bare metals should be primed immediately after cleaning. Any rusts that remain after wire brushing to be cleaned and chemically pre-treated prior to painting.
- Following surface preparation and priming, suitable intermediate and top coats are: alkyd gloss enamel, exterior quality acrylic latex, and alkyd micaceous iron oxide paint.
- Two finish coats are essential over primed steel.

Painting of Timber

- All joinery requires painting as general maintenance. When required, repaint in the same colour to match existing, and in accordance with manufacturer's specifications.
- All timber surfaces should first be washed with sugar soap to clean before preparing the surface for painting in accordance with manufacturer's specifications.
- Oil based finishes are to be used on all joinery.

3.2.6. Roofer and plumber

Corrugated Metal

- Access ladders or a set of ladders for use on the roof should be made to facilitate regular inspection and repair. Access ladders should be kept on site for emergencies.
- Roofs should not be renewed or straightened beyond what is essential for safety and watertightness.
- Where new corrugated metal is required, use salvaged material where available. Ensure the finished appearance of the new corrugated metals match the existing.
- Ensure flashings and counter flashings are fully functional. This is particularly relevant at junctions with vertical wall surfaces and in valley gutters. Where necessary, replace with new flashings and counter flashings to match exiting.
- Ensure that the roof sheeting is well nailed or screwed down. Loose fixings allow wind to blow in rain and further dislodge the sheeting.

- To minimize corrosion, ensure compatibility of all metals. This is particularly relevant when introducing new metals. Zinc (or galvanized steel) and copper should not be used in conjunction with each other. Lead flashing should not be used in association with steel sheeting coated with a zinc-aluminium alloy. Lead flashing can be used in association with galvanized steel.

  Note: if repainting/replacing a galvanized steel roof (or limited sheets) with Zincalume, lead flashings, gutters and downpipes will also require replacing due to corrosion problems.

Roof Plumbing

- Inspect gutters and confirm adequate slope towards downpipes. Check flashings and pointing are in correct location and performing as intended. Inspect masonry surfaces adjacent to rainwater heads and downpipes for signs of damp.
- Gutters and downpipes should be manufactured from the same material. This material should be compatible with, or in keeping with, the roofing material and its fixings.
- Install new rainwater channels, rainwater spreaders and downpipes where necessary in an appropriate non-corrosive material. New rainwater goods to match the original in size, profile, fixing and finish. It may be appropriate to use slightly wider gutters with the same profile as the original to improve capacity.
- Ensure compatibility of roofing and roof drainage materials; avoid galvanic corrosion caused by dissimilar materials. Gutters, rainwater heads and downpipes should be of the same material. PVC rainwater goods are not to be used.
- Ensure all rainwater channels, downpipes and gully traps are cleaned of debris and are fully functional. Ensure downpipes properly discharge into gully traps or rainwater heads.

3.2.7. Metal worker

- To minimise corrosion, ensure compatibility of all metals. This is particularly relevant when introducing new metals. Zinc (or galvanised steel) and copper should not be used in conjunction with each other. Lead flashing should not be used in association with steel sheeting coated with a zinc-aluminium alloy. Lead flashing can be used in association with galvanised steel.
- Gutters and downpipes should be made in the same material. This material should be compatible or, in keeping with, the roofing material and its fixings.

3.2.8. Carpentry and joinery

- All material used for repair or new joinery is to be the best of its kind and to be kept true, free from twist or other distortion.
- All original timber fabric is to be retained and patch repaired as necessary, or as specified. Where a missing section of an element is required to be reproduced, the new element is to match the size, species and profile of the existing.
- It is preferable to use a single timber species for repair work that is equivalent to the density and strength of the original or early timber. It is imperative that original and early timber species are confirmed prior to sourcing new timbers.
- Guidelines for joint repairs:
  - Where replacement of a portion of a single timber member is required, carry out repairs using spliced or scarfed joints. It is preferable to retain as much of the existing fabric where possible.
  - Where less than 40% of a timber element is damaged, new timber is to be scarfed in rather than a whole length replaced. It is preferable to retain as much of the existing fabric where possible.
  - It is preferable that spliced or scarfed joints have diagonal ends selected in a way to preserve as much fabric as possible.
  - Use a marine grade epoxy adhesive (example: Titebond or Norglass) when gluing spliced or scarfed joints.
  - Steel plates either side of a member (or top and bottom), bolted through the timber can also be used as reinforcement of timber members.

- Respect the original work and follow the original joiner's detailing.
- Consult the built heritage specialist on ways to allow the new work to be suitably identifiable as such.
- Adopt the method of retaining as much original fabric as possible by only removing the minimum amount of decayed or damaged timber.
- Use salvaged timbers where possible.
- Retain and respect the patina of the timber/ joinery as evidence of its age and life. Retain evidence of wear and tear; do not attempt to make the element look new.

3.2.9. Doors and windows

- Investigate all door and window components, including, but not limited to, hinges, joints, bottom and top faces of opening sections and glazing. Undertake cleaning, repair and replacement works to ensure they are in working order.
- All repairs and reconstructed elements are to match the original in material, profile, and finish.

3.2.10. Glazier

- Preserve all existing glass insofar as is practicable. It is not necessary to replace cracked original glass panes unless they are no longer weathertight.
- If complete replacement is required, then ensure the existing window panel configuration is matched in terms of dimensions and profile of mullions.

3.2.11. Plaster finishes

- Minor dents and scrapes can be repaired to manufacturer's recommendations using a proprietary patching compound. Touch up low spots with additional compound and high spots by light sanding with a wet sanding sponge or to manufacturer's recommendations. Once dry, lightly sand ready for painting.
- Ensure new plasters match original.

3.2.12. Services

- Where required, new services and cables should be surface mounted and installed without chasing into original walls. Locations of new services are to be in consultation with, and to the approval of, the built heritage specialist.

3.2.13. Scaffolding

- Should scaffolding be required during the works, ensure that it is freestanding and that no fixings are made to the structure under any circumstance.
- Ensure scaffolding has restricted access outside normal construction hours to prevent vandalism or theft.
- Provide kickboard at all levels to assist with the prevention of items falling.
- Ensure all health and safety standards for scaffolding are met.

3.2.14. Landscape

- All underground services should be checked to ensure that there are no breaks or leaks. This includes soil water, wastewater, stormwater and water supply services.
- External water taps and downpipes should discharge into drains and not onto the ground.

3.3. Implementation of Conservation Works

The following inventory has been prepared for the former Wormald Building (front entrance, tower and curved former canteen only). It should be read in conjunction with *3.1 Preliminary and General* and *3.2 Conservation Methodology Notes.*

The 80% construction drawings for Stage 2 prepared by Tonkin Zulaikha Greer Architects Pty Ltd (June 2024) provide reference points for areas under discussion and have been listed below:

Date	Drawing Title	Drawing No.
June 2024	S2 - Cover Page	A0000
June 2024	S2 - Drawing List	A0001
June 2024	S2 - Legend	A0002
June 2024	S2 - Staging Plan	A0003
June 2024	S2 - Wall Types Legend	A0008-A0009
June 2024	S2 - Floor Types Legend	A0010
June 2024	S2 - Roof and Ceiling Types Legend	A0011
June 2024	S2 - Accommodation Schedule	A0100
June 2024	S2 - Room Finishes Schedule	A0102
June 2024	S2 - Demolition Plan	A0200-A0205
June 2024	S2 - Demolition Elevation	A0209-A0210
June 2024	S2 - Overview Plan	A0300-A0305
June 2024	S2 - General Arrangement Plan	A1000-A1016
June 2024	S2 - Wall Types and Set Out Plan	A1100-A1116
June 2024	S2 - Reflected Ceiling Plan	A1200-A1218
June 2024	S2 - Concrete Set Out Plan	A1300-A1320
June 2024	S2 - Floor Types Plan	A1400-A1404
June 2024	S2 - Level 1 Waterproofing Coordination	A1451
June 2024	S2 - Project Coordination Plan Fire	A1501-A1506
June 2024	S2 - Project Coordination Plan Thermal	A1600-A1605
June 2024	S2 - Project Coordination Services	A1700-A1710
June 2024	S2 - Waterproofing Coordination	A1800-A1803
June 2024	S2 - Elevation	A2000-A2007

Date	Drawing Title	Drawing No.
June 2024	S2 - E-W Section 2	A3001
June 2024	S2 - Noise Barrier Wall Long Section 01	A3203
June 2024	S2 - Existing Stair	A5000-A5003
June 2024	S2 - Lift	A5100, A5102
June 2024	S2 - Ramp Details	A5200
June 2024	S2 - Door Schedule	A6000-A6003
June 2024	S2 - External Glazing Schedule	A6101-A6105
June 2024	S2 - Window Schedule	A6200-A6202
June 2024	S2 - Joinery Schedule	A7900-A7905

3.3.1. Setting

SETTING			
Location	**Elements**	**Works**	**Conservation Methodology Notes**
Setting	Trees and plantings	▪ All vegetation adjacent to building elevation is to be carefully pruned or removed to avoid overhanging the building/clogging rainwater goods. ▪ All vegetation to the north and west of the building (area proposed for new landscaping works) is to be carefully removed.	3.2.14 Landscape
Setting	Stormwater/ ground drainage	▪ Check ground levels immediately adjacent to the building. Ensure the subfloor air vents remain fully functional. ▪ Ensure adjacent external ground level is below damp-proof course level. Adjust ground level to suit. ▪ Licenced plumber to check stormwater lines flow as intended.	3.2.14 Landscape
Setting	Drainage Channels	▪ Clean out debris; remove vegetation where necessary. Repair missing or deteriorated mortar to allow stormwater to flow freely to existing sump.	

3.3.2. Former Wormald Building: Exterior

EXTERIOR			
Location	**Elements**	**Works**	**Conservation Methodology Notes**
Roof (General)			
Main roof	General (corrugated roof cladding and concrete terrace)	▪ Carry out an inspection of the corrugated roof at front entrance and concrete terrace at curved canteen and clock tower to ensure weathertightness.	3.2.6 Roofer and plumber
Terrace	Clock tower	*General* ▪ Clean out debris; remove vegetation where necessary. ▪ Investigate for any cracked surface in the terrace that allows water seepage. ▪ Patch repair and make good wall surface. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist. ▪ Remove all redundant services (such as cables, conduits, etc.) and make good the surrounding surfaces. *Timber Deck* ▪ Retain existing timber deck. Refurbish and make good as necessary and apply a finish coat. *Timber window frames* ▪ Inspect the timber window frames for rotting, decaying, cracking, paint peeling and termites. ▪ Clean, repair and repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.4 Masonry 3.2.5 Paints and finish coats 3.2.8 Carpentry and joinery
Terrace	Above curved former canteen	▪ Design detail relevant to new landscape works to be provided to built heritage specialist for approval prior to construction. ▪ Clean and make good the surroundings post work as necessary.	
Main roof	Rainwater goods	▪ Ensure functionality of all rainwater goods. ▫ Scoop leaves and major debris out of the gutters. Flush smaller debris out of the gutters with a hose and watch the underside of the gutter for leaks and make sure water exits freely through the downpipe. ▫ Check for standing or extremely slow-moving water at the roof or in the	3.2.6 Roofer and plumber 3.2.7 Metal worker

EXTERIOR			
		concrete terrace in the gutter. Ensure water flows towards downpipes. ▪ Remove redundant rainwater goods where relevant. Where new rainwater goods are proposed ensure compatibility with other materials. Position new downpipes in areas of existing insofar as is practicable. PVC rainwater goods are not permitted. ▪ Replace failed gutters and downpipes with new to match existing profiles exactly. Prepare surface and repaint to match the existing. ▪ Ensure downpipe strainers are effective. Remediate as necessary.	
Main roof	Eaves: exposed	▪ Check the underside of the eaves for the presence of nesting birds and carry out cleaning works. ▪ Make good as necessary.	3.2.5 Paints and finish coats
Elevation: Clock Tower			
Walls	Plastered surface	▪ Patch repair and make good wall surfaces where cracking is evident. ▪ Remove any redundant fixings to wall surfaces and make good. ▪ Remove rusting from exposed reinforcement as specified. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist. ▪ Air vents to remain fully functional.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.4 Masonry 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Walls	Air vents	▪ Ensure that the future works do not block the air vents. ▪ Ensure all air vents are fully operable and vermin proof.	
Joinery	Windows - general	▪ Retain and clean windows. Refurbish as necessary. ▪ Service all original hardware. ▪ Ensure all glazing is weathertight. ▪ Cracked glazing panels should only be replaced if no longer weathertight.	3.2.9 Doors and Windows 3.2.10 Glazier
Clock		▪ Retain the existing clock in-situ and undertake repairs in agreement with the built heritage specialist. ▪ Prepare surface and repaint (paint colours to be in consultation with the built heritage specialist).	3.2.5 Paints and finish coats

EXTERIOR			
Services	General	▪ Remove all redundant services (such as cables, conduits, etc.) around the elevation and make good the surrounding surfaces.	3.2.12 Services 3.2.2 Patching and infill
Elevation: Front Entrance			
Walls	Plastered surface	▪ Patch repair and make good wall surfaces where cracking is evident. ▪ Remove any redundant fixings to wall surfaces and make good. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist. ▪ Built Heritage Specialist to undertake a walk through with the project team during the site induction to identify any areas with cracks that require patching.	3.2.2 Patching and infill 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Joinery	Opening	▪ Retain the opening as it is. ▪ Design detail relevant to connection between new works and the existing retained façade to be provided to built heritage specialist for approval prior to construction.	
Staircase	Sandstone?	▪ Clean all stone surfaces carefully using water and a soft bristle nylon brush. ▪ Inspect signs of cracking at sandstone steps and report to the built heritage specialist for further instructions. ▪ Repoint all joints around sandstone steps. ▪ Make good the stone finish as necessary if affected by the proposed works on site.	3.2.2 Patching and infill
Services	General	▪ Remove all redundant services and make good the surrounding surfaces.	3.2.12 Services
Elevation: Curved Former Canteen			
Walls	Plastered surface	▪ Patch repair and make good wall surfaces where cracking is evident. ▪ Remove any redundant fixings to wall surfaces and make good. ▪ Repair render and remove rusting from exposed reinforcement as specified. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.4 Masonry 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Walls	Air vents	▪ Ensure that the future works do not block the air vents. ▪ Ensure all air vents are fully operable and vermin proof.	

EXTERIOR			
Joinery	Windows - general	▪ Retain the curved opening as it is. ▪ Design detail relevant to new windows and connection between new windows and the existing retained façade to be provided to built heritage specialist for approval prior to construction.	
Services	General	▪ Remove all redundant services (such as cables, conduits, etc.) around the elevation and make good the surrounding surfaces.	3.2.2 Patching and infill 3.2.12 Services

3.3.3. Former Wormald Building: Interior

INTERIOR			
Location	**Elements**	**Works**	**Conservation Methodology Notes**
Clock Tower			
Ceiling	Plastered surface	▪ Investigate and remediate falling damp at the ceiling. ▪ Patch repair and make good surfaces as necessary. ▪ Clean, prepare surface and repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Walls	Plastered surface	▪ Patch repair and make good wall surfaces where cracking is evident. ▪ Remove any redundant fixings to wall surfaces and make good. ▪ Investigate and remediate rising and falling damp prior to carrying out remedial works or applying finish coatings. ▪ Clean, prepare surface and repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Joinery	Doors	▪ Where removal/replacement of doors is proposed, seek advice from built heritage specialist.	3.2.9 Door and windows

INTERIOR			
Joinery	Windows	▪ Retain and clean windows. Refurbish as necessary. ▪ Service all original hardware. ▪ Ensure all glazing is weathertight.	3.2.9 Doors and Windows 3.2.10 Glazier
Staircase	Timber	▪ Retain and make good as necessary. ▪ Inspect for any signs of rotting and deterioration in timber staircase and patch repair as necessary. ▪ Clean and prepare surface. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.5 Paints and finish coats 3.2.8 Carpentry and joinery
Staircase	Metal balustrade	▪ Retain and clean. ▪ Check fixings. Repair where required. ▪ Repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.5 Paints and finish coats 3.2.7 Metal worker
Staircase	Concrete	▪ Clean and make good as necessary.	3.2.2 Patching and infill
Other	Services	▪ Remove redundant fixings (casing, capping and cables) and make good the surrounding surfaces. ▪ Patch repair where necessary and make good.	3.2.12 Services
Curved Former Canteen			
Ceiling	Decorative plaster & cornice	▪ Retain original plastered detailing and make good. ▪ Investigate and remediate falling damp at the ceiling. ▪ Patch repair and make good surfaces as necessary. ▪ Clean, prepare surface and repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.5 Paints and finish coats 3.2.11 Plaster finishes
Walls	Plastered surface	▪ Patch repair and make good wall surface s where cracking is evident. ▪ Repair render and remove rusting from exposed reinforcement as specified. ▪ Investigate and remediate rising and falling damp prior to carrying out remedial works or applying finish coatings. ▪ Clean, prepare surface and repaint. New paint colours to be in consultation with the built heritage specialist.	3.2.2 Patching and infill 3.2.3 Rising and falling damp 3.2.5 Paints and finish coats 3.2.11. Plaster finishes

INTERIOR			
		▪ Design detail relevant to new works in the curved canteen to be provided to built heritage specialist for approval prior to construction.	
Flooring		▪ Design detail relevant to new flooring to be provided to built heritage specialist for approval prior to construction. ▪ Clean and make good the surroundings post work as necessary.	
Other	Services	▪ Remove redundant fixings (casing, capping and cables) and make good the surrounding surfaces. ▪ Patch repair where necessary and make good	3.2.2 Patching and infill 3.2.12 Services

4. APPENDICES

4.1. Photographs (CPH, 17 July 2024)

Figure 3: Western façade of the subject building at 800 Pittwater Road, view looking northeast.

Figure 4: Western façade of the subject building with front entrance and tower, view looking east.

Figure 5: Clock tower (heritage fabric) at the former Wormald Building, view looking east.

Figure 6: Former curved canteen (heritage fabric) at the former Wormald Building, view looking southeast.

Figure 7: Former curved canteen (heritage fabric) at the former Wormald Building, view looking southwest.

Figure 8: Western elevation of the subject building containing a flat overhanging roof, view looking northeast.

Figure 9: Open carpark located to the north of the subject site, view looking east.

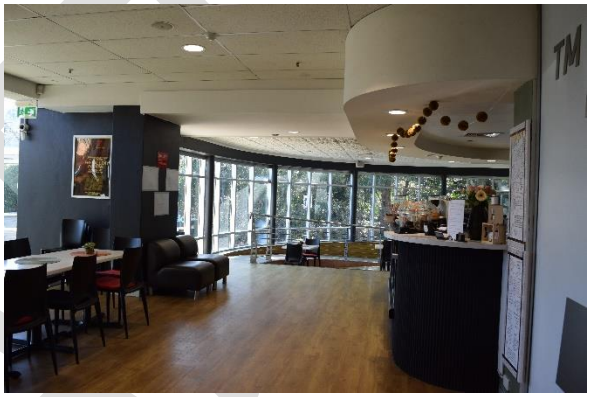

Figure 10: Existing café and seating area in the existing former canteen.

Figure 11: General view of the entrance lobby leading to the reception for the gym.

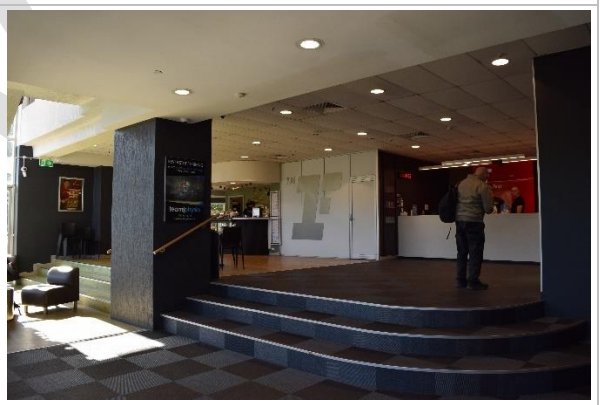

Figure 12: General view of the entrance lobby leading to the reception for the gym.

Figure 13: Timber deck at the terrace of Clock Tower.

Figure 14: Timber deck at the terrace of Clock Tower.

Figure 15: Timber staircase in the Clock Tower.

Figure 16: General view of the Clock Tower.

Figure 17: Corner window in the Clock Tower.

Figure 18: General view of the Clock Tower.

Figure 19: Existing circular window in the staircase corridor for Clock Tower.

Figure 20: Entrance to the staircase corridor for Clock Tower.

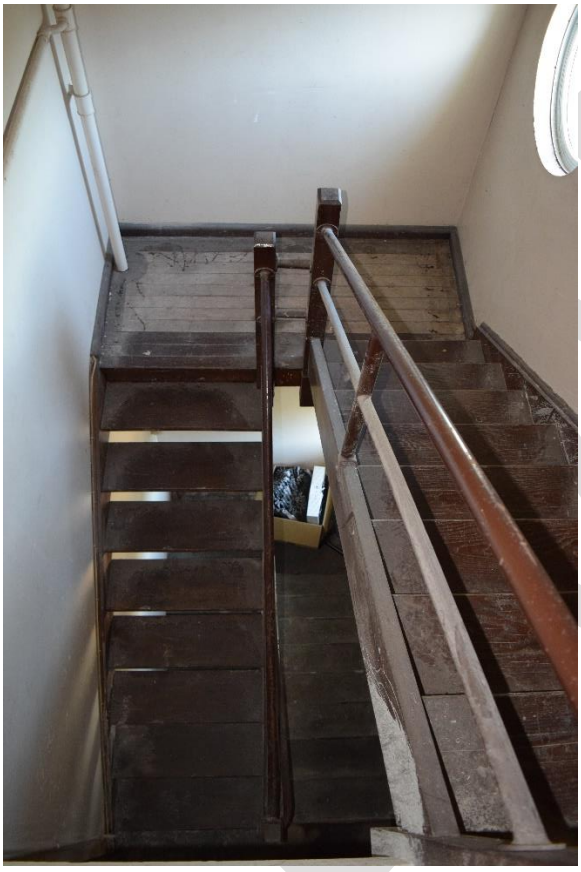

Figure 21: Staircase corridor leading to the Clock Tower.

Figure 22: Staircase corridor leading to the Clock Tower.