Sydney Trains Environmental Management System
Site Environmental Management Plan (SEMP)

Introduction

Sydney Trains is the proponent and determining authority for this activity. This environmental impact assessment is being completed in accordance with Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Part 8 of the Environment Planning and Assessment Regulation 2021 (EP&A Reg). This SEMP forms the assessment when paired with the associated Environmental Work Method Statements.

The activity covered by this assessment is routine maintenance or ancillary works associated with the ongoing safe operation and management of the Sydney Trains rail network in accordance with NSW and Federal statutory objectives. As such, and in respect to this assessment, the cumulative impacts of the routine maintenance and ancillary works are negligible and alternatives to undertaking the works have not been assessed.

1 Project / Program details

Project / Program Details		
Project/Program Name	Petersham Terminus Street Building works	
Project/Program No	P.0084885	
Scope of Works	Undertake a full restoration of external elements of the building based on Heritage Architect plans and scope of works, to bring the building back to original fabric. Heritage maintenance works including; Re-slate of roof sections, adjustment and refurb of windows, refurb of roof, painting works and misc.. works as per heritage approvals.	
What is the cost of the scope of works?	☐ Routine maintenance - any value ☑ Capital investment - less than $5 million ☐ Capital investment - more than $5 million	
Location	Petersham – 5.540 km	
Attach applicable Environmental Work Method Statement (EWMS)	EWMS Number	EWMS Title
	EMS-03-EW-0299	Station Refresh
Is any of the proposed work outside of the EWMS' scope?	☑ No: Continue to next question	
	☐ Yes: *Contact your environmental officer to determine how the works' environmental assessment can proceed*	
Does this work have any steps or equipment that are not covered by the EWMS?	☑ No: Continue to next question ☐ Yes: Provide details below	
Is the work part of a larger job?	☑ No: Continue to *Part 2 Project Timing and Location* ☐ Yes: Provide details of larger job and relationship to these works	

	Contact your local environmental officer. The larger project may have environmental controls that need to be applied to this job. *All relevant conditions and controls need to be added to PART 5. Summary of approvals and control measures*

2 Project timing and location(s)

2.1 Project timing

Activity	Dates & work hours, noting any 'Out of hour' periods (Out of hour = outside of 7am–6pm Monday to Friday or 8am–1pm Saturday)
Works/program commencement: *Including pre-works, site establishment (including access, laydown/stockpiles, site amenities, parking), installation of erosion and sediment controls, etc*	Project Planning – Complete Approvals – Complete Construction – April – June 2024 Project Completion – July 2024
Site construction and/or periodic maintenance activities *For programs/ recurring maintenance detail recurrence frequency and work hours of activities*	Work hours will be 7am – 6pm weekdays & 8am – 1pm Saturdays
Works/program completion: *Including demobilisation and removal of all site offices, equipment and materials.*	Est. July 2024

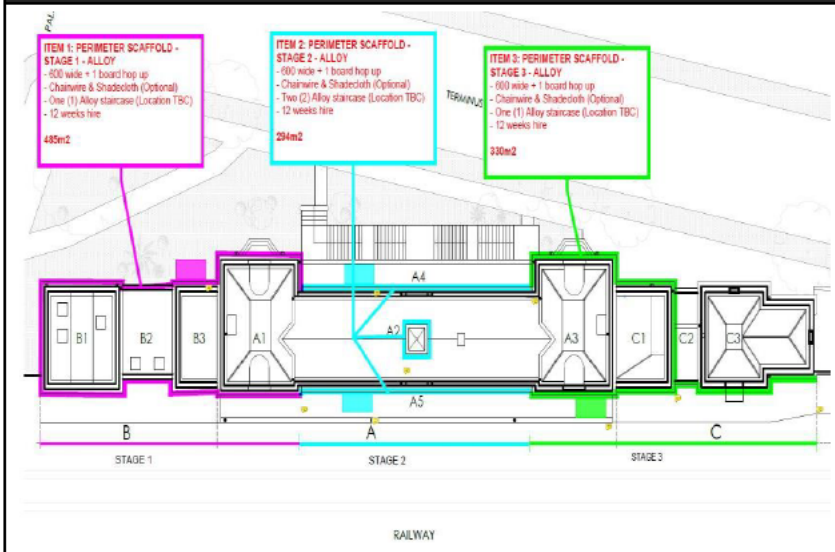
2.2 Existing environment

Where multiple sites are to be covered by this form each location is to be identified separately in the following question set (e.g. Site 1, Site 2, etc)

The descriptions are to be derived from desktop studies such as aerial photos, overlays and databases (e.g. WebGIS ME) and are to be confirmed, modified and expanded by a pre-work site inspection and. Descriptions must include aspects such as acute slope/fall, waterways, drains, vegetation and individual trees, heritage items or curtilage, difficult access, traffic, nearest neighbours etc

Site 1: Aerial View

Local environment includes:
- ☑ In, or near, residential area
- ☐ In, or near, customer areas
- ☐ Tunnel/underground location
- ☐ Easement/off corridor areas
- ☐ Open spaces
- ☐ Sparsely vegetated spaces
- ☐ Thickly vegetated spaces
- ☐ In, or near, waterways or drains
- ☐ Other (specify):

Site 2 Terminus Street Building.	
	Image of Terminus Street Building.
Site 3: Aerial View and Scaffold Mark-Up	
	Aerial View and Scaffold Mark-Up

3 Consultation requirements

3.1 Consultation with adjoining land managers

Do the works require consultation with other land managers[1]?	
Will the works result in substantial impacts on Council related infrastructure and services or locally listed heritage items? (i.e. local heritage items, stormwater, traffic, sewerage, water or impact on public place or footpaths, or works that impact flood prone areas or coastal areas)	☑ No: Continue to next question ☐ Yes: Identify requirements and how they were addressed:
Are the works adjacent to land reserved under the *National Parks & Wildlife Act 1974?*	☑ No: Continue to next question ☐ Yes: Identify requirements and how they were addressed: .....

Do the works require consultation with other land managers[1]?	
Consultation required with other stakeholders (e.g. Roads, Crown Land, Private landholder etc.)	☑ No: Continue to next question ☐ Yes: Identify requirements and how they were addressed:

(1) Where consulted, all land managers must have a minimum 21 days to provide comments. Comments received must be considered and appropriate actions identified in *Part 5.1*

3.2 Community consultation

Could there be community interest in the works?	
☑ No: Community consultation assessment not required	☐ Yes: Complete **EMS-03-FM-0104 *EIA Public Engagement Assessment*** and identify the assessment outcome; ☐ 'Outrage' risk management ☐ Targeted public consultation ☐ Public engagement not required Actions arising from this assessment are to be identified in *Part 5 Summary of approvals and control measures* Letterbox drop issued 27 Mar 24 to advise of upcoming works

4 Environmental assessment

4.1 Working outside the Active Operational Zone (AoZ)

Are any works to be completed outside the AoZ?	
☑ No: Continue to Section *4.2 Vegetation condition*	☐ Yes: *Contact your environmental officer for support.* ***EMS-03-FM-0249 EWMS activities outside AoZ** must be completed by an environmental officer and must be attached to this SEMP.*

Vehicle access across land that is not in the control of Sydney Trains via roads, access ways, easements, or with the consent of the relevant landowner is not considered to form part of the works outside the AOZ

4.2 Vegetation condition

Has all the vegetation within the worksite been maintained[1] within the last 10 years?	
☑ Yes: Continue to Section 4.3	☐ No/Don't know Discuss with your local environmental officer whether the site should be considered as a sensitive site due to some biodiversity aspect. If so, add site to 4.3 Sensitive Sites as directed

Note (1): 'Maintained' means pruned, weeded, mowed or other activity that significantly disturbed the vegetation.

4.3 Sensitive sites

For works undertaken outside of the AOZ the following section is to include all sites identified by the environmental officer in the activities' **EMS-03-FM-0249 *EWMS activities outside AOZ.***

Will the works be located in, or within 100m of a Sensitive Site? (Ref: Web GIS ME)	
• Aboriginal heritage site or Environmentally Sensitive Site?	☐ Yes ☑ No
• Contaminated Site?	☐ Yes ☑ No
• Non-Aboriginal Heritage site?	☑ Yes ☐ No

A separate line is to be completed in the following table for each site/location identified		
Location and distance (m) from the worksite	**Nature of site** (Details from database or register)	**Potential for the works to impact [2]**
Within project area	Petersham Railway Station group State Heritage Register No. 01223	Low, works will result in building improvements with heritage controls in place.

Notes:

- Information about sensitive sites must be sufficient to be able to make an informed decision on potential impacts and appropriate project controls.
- Additional assessments may be required for works in or adjacent to some sensitive sites. Please see the environmental officer and/or individual subject matter procedures for specific requirements.
- Where works have the potential to impact sensitive sites the required additional controls, approvals, notifications, etc must be listed in the relevant section of *Part 5 Summary of approvals and control measures*

4.4 Noise and vibration assessment of the works

A. Are there any noise sensitive receivers [1] within 350m of works?	
☐ No Works do not need further noise assessment, go to Section 5.	☑ Yes Describe receivers and continue to Part B. Receivers: Residential Distance: Directly Opposite (<100m)

B. Track work on a moving face		
Will work be limited to track work on a moving face, be undertaken for less than five (5) consecutive days and consist only of one or more of the following activities: ☐ Ballasting or ballast clean ☐ Resurfacing (tamping, stabilising, regulating) ☐ Rail profiling ☐ Continuous track welding / rail adjusting	☐ Yes	Works do not need noise and vibration assessment, go to Section 5.
	☑ No	Continue to Part C.

C. Answer the following		
Will there be any equipment producing noise levels of:	☑ No	Works do not need further noise and vibration assessment, go to

☐ more than 80 dBA (2) during Standard Hours (3), and/or ☐ more than 60 dBA (2) outside of Standard Hours (3) or ☐ Will the works use pile drivers, hydraulic hammers or vibratory rollers (or similar vibration inducing plant)? or ☐ Will works at any one location last more than 3 weeks in duration?		Section 5.
	☐ Yes	Complete **EMS-09-FM-0166 *Maintenance Quantified Noise and Vibration Assessment*** and include any resulting actions in Section 5.
(1) Noise sensitive receivers include residences, hospitals, places of worship, schools, aged, childcare facilities, etc. (2) Noise levels are for the loudest equipment's 'Modified 10m Sound Pressure' as given in **EMS-09-FM-0166 *Maintenance Quantified Noise and Vibration Assessment*** ('SoundPressure' Table, 'References' Tab). (3) Standard Hours' = 7am-6pm Monday to Friday and 8am-1pm Saturday		

5 Summary of approvals and control measures

For works undertaken outside of the AOZ, the following section is also to include all actions and controls arising from the project's **EMS-03-FM-0249 *EWMS Activities Outside of AOZ*.**

5.1 Permits, approvals and consultation

Describe all relevant permits, approvals and consultation requirements for the works.

Environmental Hazard	Permits/Other Requirements	Timing	Responsibility
Heritage	Approved APPLICATION UNDER SECTION 60 OF THE HERITAGE ACT 1977 Petersham Railway Station group State Heritage Register No. 01223, HMS ID 5450, received 12/01/2024, approved 20 February 2024.	Approved prior to works	Project Manager

5.2 Environmental controls

Environmental Hazard	Work controls and responsibility *including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities*
Works community notification:	*Project manager* Letterbox notification provided: Local ☑ Possession ☐
Awareness and responsibility: *Staff unaware of the works' environmental controls and their responsibilities*	*Site supervisor* • Undertake site pre-work briefings and local inductions using the SEMP and the SECM to cover the work's environmental risks and controls and the workers environmental responsibilities • Delivery tool-box talks relevant to the environmental hazards • Maintain a readily accessible copy of the environmental approval (including all associated specialist approvals and plans) at the worksite whenever work is being undertaken. • Display prominently on site, where possible, the SECM and make sure it is accurate and used

Environmental Hazard	Work controls and responsibility *including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities*
Dust: *Emissions of dust leaving site from earthworks, stockpiles and works traffic*	• Select plant and equipment for the task that is fit for purpose and minimises dust generation • Use water cart to dampen exposed surfaces including access roads, work areas and stockpiles • Cover long term stockpiles • Minimise removal of vegetation from worksite • Keep vehicles to existing access roads
Environmentally sensitive sites: *Unintentional or unapproved impact on environmentally sensitive sites*	N/A – No Environmentally sensitive sites within the project area.
Erosion and sedimentation: *Loss of soil and sediment from worksite to surrounding environment, including tracking onto public roads*	• Include sediment control in stockpile management • Complete post-work site rehabilitation and erosion and sediment control maintenance and inspections (transfer ownership to operational area at end of responsibility
Heritage: *Unintentional or unapproved impact on Aboriginal and non-Aboriginal heritage*	The proposed works are to follow the conditions set out within the Approved APPLICATION UNDER SECTION 60 OF THE HERITAGE ACT 1977 Petersham Railway Station group State Heritage Register No. 01223, HMS ID 5450, received 12/01/2024, approved 20 February 2024. 1. All work shall comply with the information contained within: a) Former Petersham Station Building Roof and Exterior Works Statement of Heritage Impact Report, prepared by OCP Architects Pty Ltd, dated 8 December 2023. b) Former Petersham Station Building Schedule of Works, OCP Architects Pty Ltd, dated 8 December 2023. Standard controls: • Isolate and demarcate heritage sites to prevent accidental damage • If a heritage or archaeological item is uncovered, immediately stop further disturbance, demarcate the site, contact your environmental support and follow **EMS-09-PR-0164 *Unexpected Archaeological Finds***
Incidents and emerging issues *An incident or emerging issue is not controlled and causes an environmental impact*	*Project Manager* • Support management of emerging issues and incident management, notification, investigation and the completion of corrective and preventative actions *Site supervisor* • Complete daily inspections of the site, plant and equipment and the surrounding area • Implement incident procedures on unapproved impacts, spills and other environmental incidents • Notify incidents to the Incident and Injury Hotline 1800 772 779 or enter incident directly into SHEM
Light spill: *Impact of work light sources on neighbouring residents and properties - particularly the potential for sleep disturbance*	• Locate portable lighting towers so that they are not directed at residential properties • Ensure parked vehicles headlights do not shine into residences,

Environmental Hazard	Work controls and responsibility *including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities*
Noise and vibration: *Impact of works noise and vibration on neighbouring residents and properties – particularly the potential for sleep disturbance*	• Schedule more noisy work for 'standard hours' (7am to 9pm Monday to Friday, 8am to 1pm Saturday), where practical • Limit operating and idling plant and equipment on site, where practical • Locate noisy equipment, parking areas and assembly areas away from sensitive receivers, where practical and instruct workers to minimise noise during shift changes and at crib areas • Use non-tonal reversing alarms on vehicles, where practical • All plant and equipment to be operated with effective noise attenuation equipment (e.g. mufflers)
Plants and animals: *Unintentional or unapproved impact on native and protected plants, animals and communities and the spread of noxious weeds*	**Vegetation and wildlife management** • N/A **Pest and weed management** • N/A
Plant and equipment emissions: *Smoke, fumes., odours and other emissions from plant and equipment*	• Plant and equipment is operated and maintained in a proper and efficient manner with all of its pollution control equipment in place and functioning • Plant and equipment not used when needing repair • Plant and equipment is regularly checked for wear, leaks, odours, fumes and smoke • All plant to have suitable spill kits and operators trained in their use and the disposal of used spill kit materials
Soil contamination: *Contamination of worksite from stockpiling and chemical storage and use*	• Develop a stockpile management plan to segregate potentially contaminated materials from clean materials. • Undertake daily inspections for spills and contamination (e.g., vehicle tracking, unauthorised material movement, containment failures, etc) • Check all imported material for contamination (including weeds, construction wastes, etc)
Spills: *Unintentional loss of hydrocarbons, chemicals and materials from plant, equipment, storage and use*	• All plant to have suitable spill kits and operators trained in their use and the disposal of used spill kit materials
Traffic: *Traffic disruption to community and other users around worksite*	• Plan all vehicle movements to occur outside of local peak traffic periods • Place offsite staging areas in low impact areas • Obtain a Road Occupancy Licence, as necessary • Utilise qualified traffic control staff
Visual impact: *Visual impact on community due to works and worksite facilities and activities*	• Works will be contained in temporary fencing. • Place stockpiles and site amenities away from residents, and remove them as soon as possible • Create or maintain existing visual screens such as using vegetation, shade cloth on fences or natural site features • Keep the site tidy and free of litter
Waste: *Unnecessary generation of wastes and poor or illegal disposal of wastes*	**Construction waste (e.g. spoil, concrete, litter, etc)** • Do not overestimate quantities of materials required • Separate wastes, place all wastes in appropriate containers and dispose of them as they are generated

Environmental Hazard	Work controls and responsibility *including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities*
	• Prevent the mixing of similar new and waste materials • Classify all wastes in accordance with the NSW EPA Waste Classification Guidelines • Only use approved waste contractors and dispose of all wastes leaving site to facilities licenced to receive the waste • Keep records of all waste classification, transport, disposal, reuse and recycling activities
	Slurry wastes (e.g. concrete, supersucker, etc) N/A
	Vegetation management waste (e.g. clippings, branches, etc) N/A
⚠	*The works' SECM must illustrate the relevant work areas and site environmental controls described above*

5.3 Biodiversity offset

Is a Biodiversity Offset required for the project?	
☑ No: Continue	☐ Yes: Provide the following information: Value[1]: _____
(1) All calculations are to be in accordance with ***EMS-06-WI-0177* Biodiversity Offsets Calculator**	

5.4 SEMP documents

For environmental planning and assessment purposes the SEMP for this job comprises of:

☑ This SEMP

☑ The Environmental Work Method Statement (EWMS) referred to in Section 1

☑ The attached project's Site Environmental Control Map

Plus (tick as appropriate):

☐ **EMS-03-FM-0248 *EWMS Scope Exception***

☐ **EMS-03-FM-0249 *EWMS Activities outside AOZ*** (see Section 4.1)

☑ **EMS-10-FM-0166 *Maintenance Quantified Noise and Vibration Assessment*** (see Section 4.3)

☑ Additional environmental studies, approvals (including Aboriginal and non-Aboriginal heritage)

FORMER PETERSHAM STATION BUILDING ROOF AND EXTERIOR WORKS, STATEMENT OF HERITAGE IMPACT REPORT, 8 December 2023, Issue C.

5.5 Environmental review requirements

Is review required by an environmental assessor?

Is this for a program of work?	☐ Yes ☑ No
Is any of the work to be completed outside of the Active Operational Zone (AOZ)?	☐ Yes ☑ No
Is any work being undertaken or will impact on land controlled by others?	☐ Yes ☑ No
Is access required across land controlled by others that is not a road, easement or right of way?	☐ Yes ☑ No
Were any sensitive sites identified in Section 4.2?	☐ Yes ☑ No
Is any work being undertaken in embankments, cuttings or on the boundary fence?	☐ Yes ☑ No
Is extensive Council or other Authority consultation required?	☐ Yes ☑ No
Are environmental impacts "likely" and "significant"	☐ Yes ☑ No
Was an **EMS-10-FM-0166 *Maintenance Quantified Noise Assessment*** required (Section 4.3) AND was a work phase identified as High Risk?	☐ Yes ☑ No
Is work likely to cause community concern (other than noise)?	☐ Yes ☑ No
Were additional environmental studies or approvals (e.g. heritage) required?	☑ Yes ☐ No
Were any biodiversity Offsets required for the project?	☐ Yes ☑ No

If "Yes" to any of the above, this form must be submitted to the local environmental officer for assessment at least 4 weeks prior to the planned commencement date of the works.

Report all pollution and environment incidents immediately to SHEM or the Incident and Injury Hotline (1800 772 779) and your local environment officer.

6 Determination

The works covered by this document have been determined to proceed under Division 5.1 of the *Environmental Planning & Assessment Act 1979* and Part 8 of the *Environmental Planning & Assessment Regulation 2021* subject to the implementation of all mitigation measures and actions identified in this document.

Position of Determiner: Project manager, Sydney Trains

Date of Determination: 27/03/2024

This version of the document has been redacted to remove personal information.

To provide comments on this EIA please complete a Sydney Trains Feedback Form or call the Sydney Trains Feedback Line on 131 500.

Acknowledgement of Country

Sydney Trains acknowledges the traditional custodians of the land on which we work and live. We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

[redacted]

[redacted]

[redacted]

[redacted]

APPLICATION UNDER SECTION 60 OF THE *HERITAGE ACT 1977*

Petersham Railway Station group
State Heritage Register No. 01223

Address:	Terminus Street, PETERSHAM NSW 2049
Proposal:	Undertake a full restoration of external elements of the building based on Heritage Architect plans and scope of works, to bring the building back to original fabric.
Section 60 application no:	HMS ID 5450, received 12/01/2024

As delegate of the Heritage Council of NSW (the Heritage Council), I have considered the above Section 60 application. Pursuant to section 63 of the *Heritage Act 1977*, approval is granted subject to the following conditions:

APPROVED DEVELOPMENT

1. All work shall comply with the information contained within:

   a) *Former Petersham Station Building Roof and Exterior Works Statement of Heritage Impact Report*, prepared by OCP Architects Pty Ltd, dated 8 December 2023.
   b) *Former Petersham Station Building Schedule of Works*, OCP Architects Pty Ltd, dated 8 December 2023.

EXCEPT AS AMENDED by the conditions of this approval:

USE OF APPROPRIATE MATERIALS

[redacted]

2. a) Repainting of the building in the existing colour scheme is acceptable. Repainting of the building and its elements is to be undertaken in a manner that does not cause damage to early fabric and is in alignment with the policies of the *Petersham Railway Station Heritage Management Strategy*, prepared by Catalyst Architects, dated 19 May 2018, as follows:

   Acrylic Paint Coating: All rendered external elements have been coated in a non-breathable modern acrylic paint system, that is damaging to the masonry elements. This intrusive paint coating is exhibiting typical failure by peeling and blistering, with damaging salts trapped behind the impervious painted layer. All acrylic paint layers should ideally be removed, and a breathable coating system applied, consistent with the original Station colour, to be determined from paint scrape investigations. Mineral silicate is a suitable coating system (breathable finish). A breathable anti-graffiti coating that is non-film or gloss forming, can also be adopted as part of the coating solution. Keim is one manufacturer that offers a suitable breathable coating system.

   b) Brick work repairs are to use materials that do not cause damage to early fabric and are in alignment with the policies of the *Petersham Railway Station Heritage Management Strategy*, prepared by Catalyst Architects, dated 19 May 2018, as follows:

   Mortar Mix: If required, rejointing of any face-brick walling and repairs of any render finish to all external walling, must be undertaken using a Naturally Hydraulic Lime mortar mix or a slaked lime mortar mix. Hydrated Lime and modern cements are not appropriate and are damaging to the masonry structures (too hard) - they are prohibited from use on this building.

   c) Window glazing replacement: Window glazing is to be replaced only where glazing is damaged.

   Reason: To ensure works use appropriate materials that do not cause damage to early fabric.

HERITAGE CONSULTANT

3. A suitably qualified and experienced heritage consultant must be nominated for this project. The nominated heritage consultant must provide input into the detailed design, provide heritage information to be imparted to all tradespeople during site inductions, and oversee the works to minimise impacts to heritage values. The nominated heritage consultant must be involved in the selection of appropriate tradespersons and must be satisfied that all work has been carried out in accordance with the conditions of this consent.

   Reason: So that appropriate heritage advice is provided to support best practice conservation and ensure works are undertaken in accordance with this approval.

SPECIALIST TRADESPERSONS

4. All work to, or affecting, significant fabric shall be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage structures, materials and construction methods.

   Reason: So that the construction, conservation and repair of significant fabric follows best heritage practice.

SITE PROTECTION

5. Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed.

   Reason: To ensure significant fabric including vegetation is protected during construction.

UNEXPECTED FINDS

6. The Applicant must ensure that if substantial intact archaeological deposits and/or State significant relics or any other buried fabric such as works are discovered, work must cease in the affected area(s) and the Heritage Council of NSW must be notified. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.

Reason: All significant fabric within a State Heritage Register curtilage should be managed according to its significance. This *is a standard condition to identify to the applicant how to proceed if historical archaeological relics, or other unexpected buried discoveries such as works are identified during the approved project.*

ABORIGINAL OBJECTS

7. Should any Aboriginal objects be uncovered by the work which is not covered by a valid Aboriginal Heritage Impact Permit, excavation or disturbance of the area is to stop immediately and Heritage NSW is to be informed in accordance with the *National Parks and Wildlife Act 1974*. Works affecting Aboriginal objects on the site must not continue until Heritage NSW has been informed and the appropriate approvals are in place. Aboriginal objects must be managed in accordance with the *National Parks and Wildlife Act 1974*.

   Reason: This is a standard condition to identify to the applicant how to proceed if Aboriginal objects are unexpectedly identified during works.

COMPLIANCE

8. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent.

   Reason: To ensure that the proposed works are completed as approved.

DURATION OF APPROVAL (Last Condition)

9. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.

   Reason: To ensure the timely completion of works

Advice

Section 148 of the *Heritage Act 1977* (the Act), allows people authorised by the Minister to enter and inspect, for the purposes of the Act, with respect to buildings, works, relics, moveable objects, places or items that is or contains an item of environmental heritage. Reasonable notice must be given for the inspection.

Right of appeal

If you are dissatisfied with this determination appeal may be made to the Minister under section 70 of the Act.

It should be noted that an approval under the Act is additional to that which may be required from other Local Government and State Government Authorities in order to undertake works.

Stamped documents

Any stamped documents (e.g. approved plans) for this application are available for the Applicant to download from the Heritage Management System at https://hms.heritage.nsw.gov.au under 'My Completed Applications.'

If you have any questions about this correspondence, please contact Ruth Berendt, Senior Assessments Officer at Heritage NSW on (02) 9873 8500 or heritagemailbox@environment.nsw.gov.au

Yours sincerely

Rochelle Johnston

Rochelle Johnston
Senior Manager, Major Projects
Heritage NSW

Department of Climate Change, Energy, the Environment and Water
As Delegate of the Heritage Council of NSW
20 February 2024

cc: Inner West Council, council@innerwest.nsw.gov.au

OCP ARCHITECTS

FORMER PETERSHAM STATION BUILDING

ROOF AND EXTERIOR WORKS

STATEMENT OF HERITAGE IMPACT REPORT

Client	Sydney Trains
Job No	23014
Date	8 December 2023
Issue	C

OCP Architects Pty Ltd
Studio 7, Level 1
35 Buckingham Street
Surry Hills NSW 2010
Phone: 02 9319 4126
www.ocp.net.au
ABN: 41 002 474 035
Otto Cserhalmi NARN: 4079

Report Register

The following report register indicates the development and issue number of this report, undertaken by OCP Architects.

Document status:

Issue	Date	Purpose	Written	Reviewed
A	August 2023	Issue for Internal OCP Review	Csilla Cserhalmi	Rowan Day
B	August 2023	Client Issue	Csilla Cserhalmi	Rowan Day
C	December 2023	Final Issue	Csilla Cserhalmi	Rowan Day

CONTENTS

PART A: BACKGROUND

1. INTRODUCTION

OCP Architects have been engaged by Sydney Trains to prepare this Heritage Impact Statement for proposed works at the former Petersham Station Building, as part of Transport for NSW's ongoing conservation of the building.

The 1880s former station building is the largest and most elaborate 19th century station building constructed for the Sydney suburban rail system and is the only major 'First Class' station building known to have been built in Sydney in the 19th century and is therefore unique in the history of the NSW Government Railways. It is a fine example of a late Victorian Italianate station dating from 1885, and although compromised by later alterations and additions is substantially intact and capable of restoration. The building is unusual and of significance by being reached from the street by a grand stair in the classical manner and having a landscaped forecourt to a suburban street and forms a major part of an important historic railway precinct including the bridge and signal box and is a significant landmark in this part of Petersham, which retains much of its 19th century built street character. The station is one of a select number of similar buildings designed by the office of the Engineer for the Existing Lines Branch, George Cowdery, with the 1883 iron pedestrian bridge and steps also designed by Cowdery.

Broadly, the works subject of this report comprise conservation works to the exterior of the building, including reinstatement of slate roofing, an original feature, to areas where it has been lost. Further works include replacement of inadequate gutters and downpipes; flashing replacement; fascia replacement; crack-patching and provision of protective lead capping to parapet tops; cleaning and desalination of brickwork, and repainting of existing painted surfaces; repointing of stone entry; replacement of missing wall vents.

These works are expected to be followed by a subsequent stage of works (not assessed within this report) focussed on works to the interior of the building.

From a heritage perspective, the proposed works assessed by this report are considered to be positive, providing for the ongoing conservation of the significant building and reinstating a number of original elements. The works are considered to exceed the Section 57 RailCorp Agency Specific Exemptions under the NSW *Heritage Act 1977*, and Standard Exemptions under the *Heritage Act 1977*, and will require a Section 60 application.

1.1 This Report

This Statement of Heritage Impact Report has been prepared in order to assess the impact of the proposed works on the heritage significance of Petersham Railway Station.

This report aims to:

- Describe the existing site and the context, assess its significance and describe the proposed works.
- Assess the impact of the proposal on the heritage significance of Petersham Railway Station.

This report is structured into three parts. The Executive Summary and Introduction form **Part A.** Historical and descriptive information relating to the subject site are included at **Part B**. Assessment of heritage significance and details of the proposed works and an assessment of potential heritage impacts are included at **Part C**, which provides recommendations and measures to assist with the mitigation of heritage impacts.

1.2 Site Identification

Located within the inner western suburbs of Sydney, Petersham is located approximately 7km west of the Sydney CBD. The Petersham Railway Station is part of the Sydney Trains Network and is serviced by the Airport, Inner West and South line. The railway station site is bound by Terminus Street to the north, Trafalgar Street to the south and the rail corridor to the east and west. The original station building, and platform runs alongside Terminus Street.

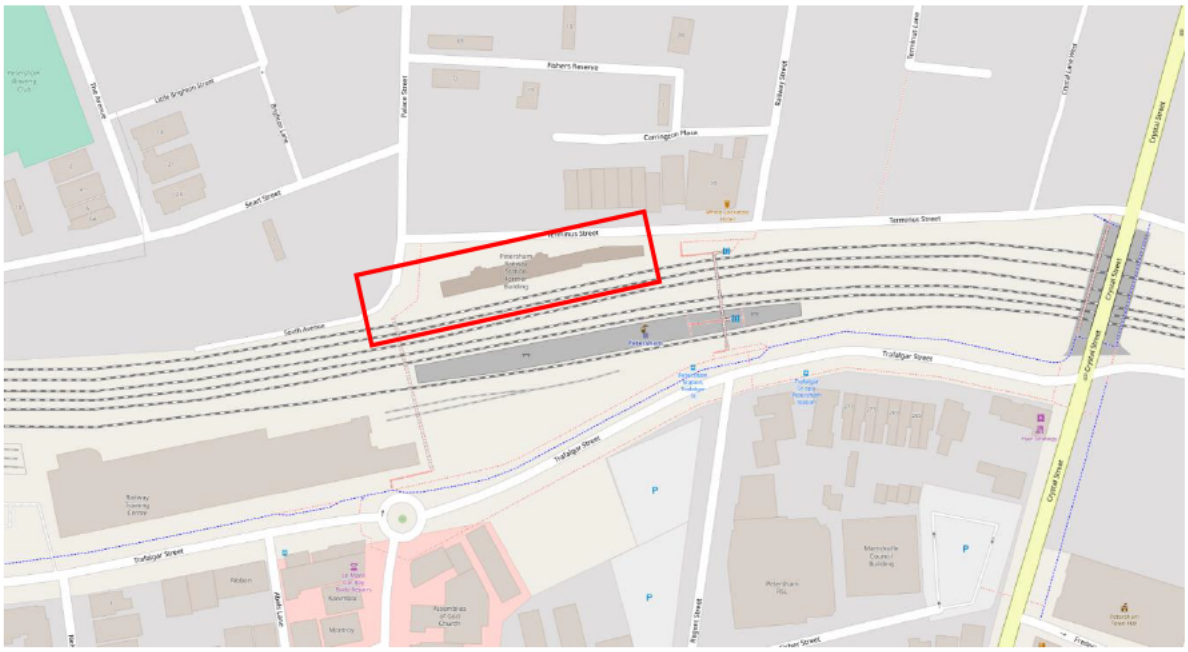


Figure 1: Location Plan showing Petersham Railway Station and its immediate vicinity. The former station building subject of this report, indicated in red, is located on the northern side of the tracks. Source: OpenStreetMap 2023.

Figure 2: Aerial View of the Petersham Railway Station site, with the former Station Building and rendered brick extension outlined in red. (Source: Nearmap, 2023)

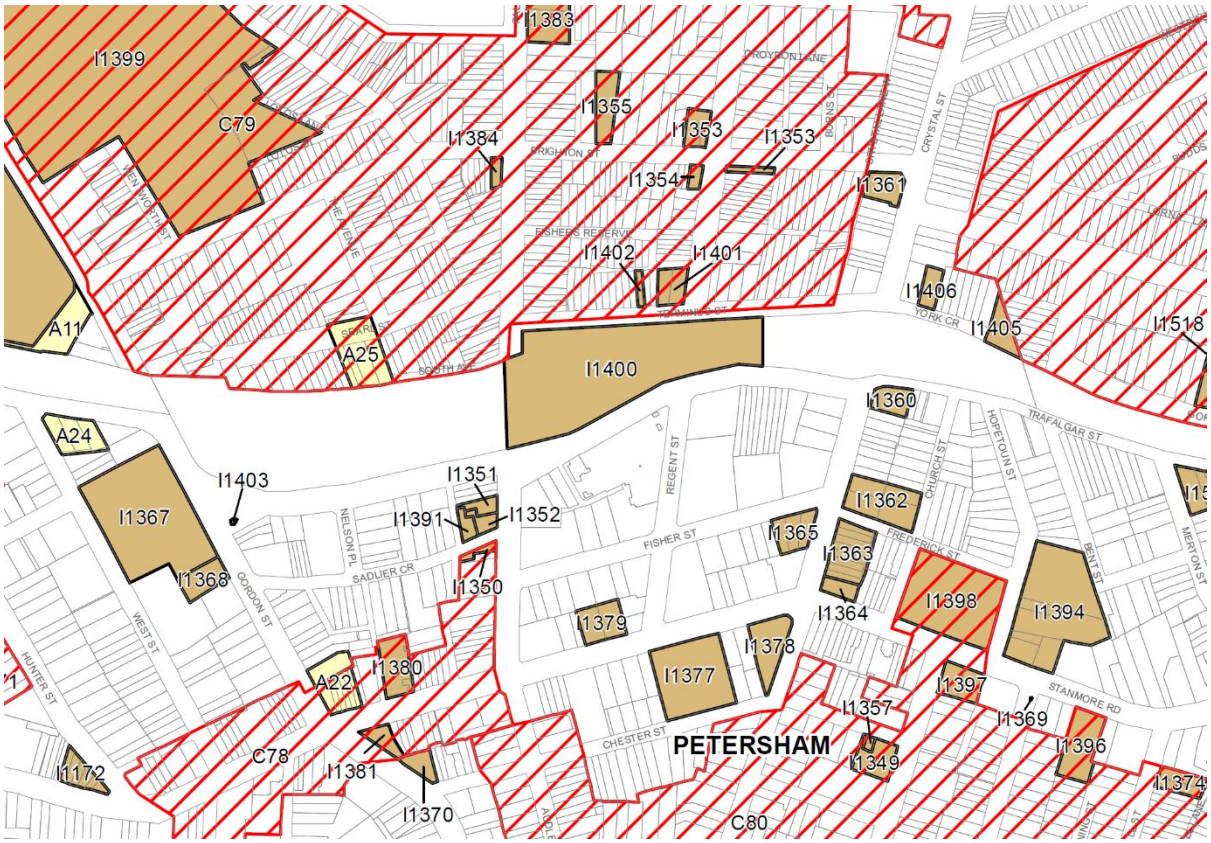


Figure 3: Inner West Council Heritage Map HER-005 extract. Petersham Railway Station is shown as Item 1400. Source: Inner West LEP 2022.

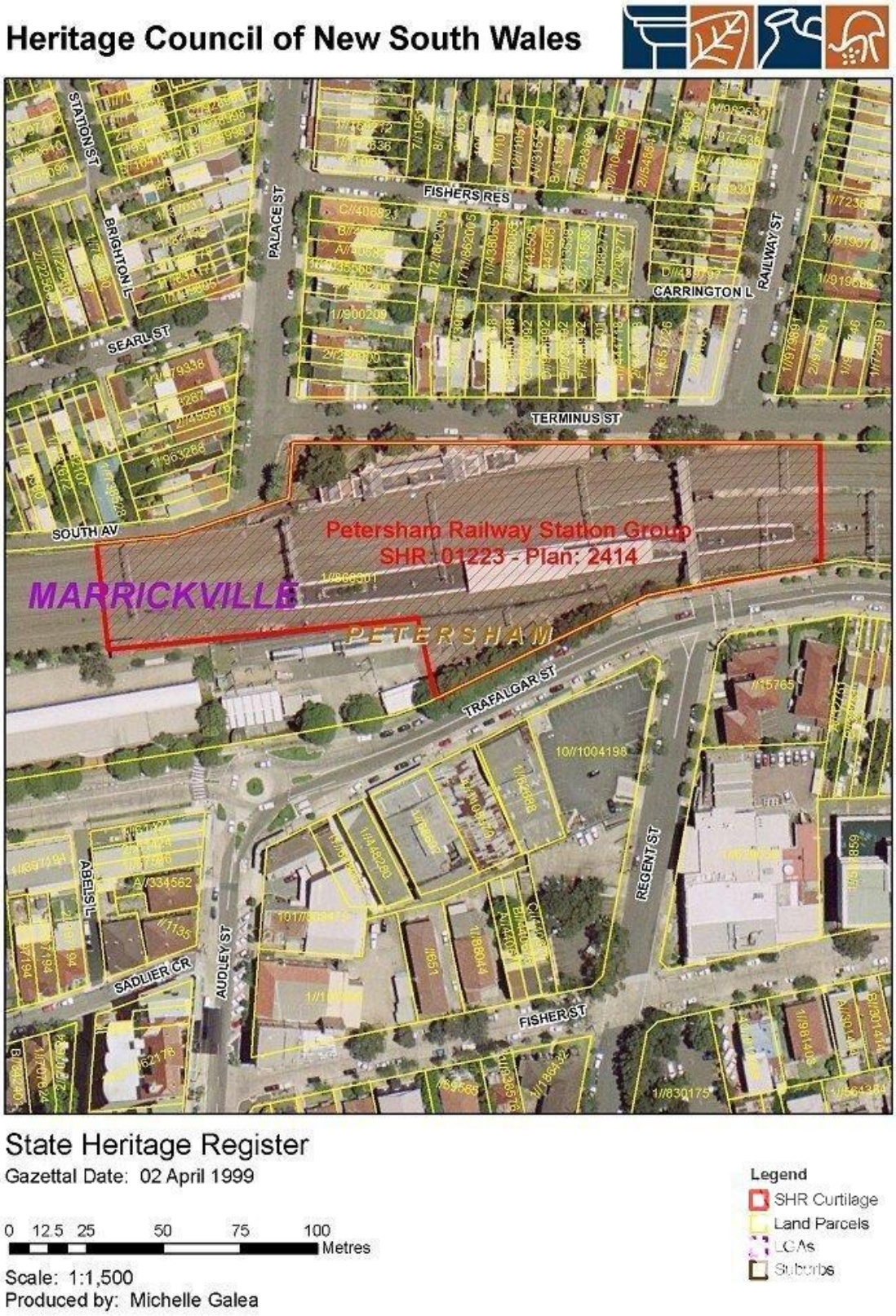


Figure 4: State Heritage Register listing curtilage plan of Petersham Railway Station Group (Item 01223), Source: NSW State Heritage Inventory form for the SHR listing for Petersham Railway Station Group.
https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012133 accessed August 2023.

1.3 Statutory Context and Heritage Listings

The following paragraphs provide an outline of the statutory planning and heritage management framework and how the various forms of legislation and environmental planning instruments apply to the site and the proposed works.

1.3.1 Heritage Act 1977

The Heritage Act 1977 provides protection for heritage places, buildings, works, relics, moveable objects, precincts and archaeological sites that are important to the people of NSW. The State Heritage Register includes heritage items which are deemed to be significant to the people of New South Wales.

Petersham Railway Station group is listed as an item of State heritage significance on the NSW SHR (listing number 01223).

Statutory approval requirements for items listed on the SHR are outlined in Part 4, Division 2 and 3 (sections 57 to 69) of the *Heritage Act 1977*.

Section 57(1) of the *Heritage Act 1977* provides an outline of the types of work that must not be carried out to items listed on the State Heritage Register or subject to an interim heritage order or items without approval. In accordance with Section 57(2) of the *Heritage Act 1977*, the Minister may grant exemption from approval in respect of engaging in or carrying out certain types of activities.

It is a requirement that Sydney Trains submit a S60 application to Heritage NSW for approval to carry out proposed changes to the SHR-listed site, described in Section 5 of this report, which exceed the rail specific exemptions gazetted for use by Sydney Trains on 13 March 2015.

1.3.2 Section 170 Heritage Register

Under Section 170 of the *Heritage Act 1977*, each government agency is required to establish and keep a *Heritage and Conservation Register* that details each item of the environmental heritage the agency owns or occupies.

In accordance with Section 170A(2) of the Act, government instrumentalities are responsible for ensuring that the items listed on its register are maintained with due diligence in accordance with the State Owned Heritage Management Principles.

The State Owned Heritage Management Principles which are of specific relevance to the proposed works have been included below for reference:

4. Conservation Outcomes

Heritage assets should be conserved to retain their heritage significance to the greatest extent feasible. State agencies should aim to conserve assets for operational purposes or to adaptively reuse assets in preference to alteration or demolition.

9. Alterations

Alterations should be planned and executed to minimise negative impacts on heritage significance (including curtilage and setting), and appropriate mitigating measures should be identified.

Petersham Railway Precinct is listed as a heritage item on the RailCorp Section 170 Heritage and Conservation Register (Item 4801094).

1.3.3 Environmental Planning & Assessment Act 1979

Planning and development in NSW is predominantly governed by the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EP&A Act provides for the making of Environmental Planning Instruments which include State Environmental Planning Policies (SEPPs) which address matters of state or regional significance; and Local Environmental Plans (LEPs) which apply to a specific Local Government Area (LGA).

1.3.4 Inner West Local Environmental Plan 2022

Petersham Railway Station is located within the Inner West Local Government Area and as such, development in the area is currently controlled by the Inner West Local Environmental Plan 2022 (IWLEP 2022).

Schedule 5 of IWLEP 2022 lists the subject site, Petersham Railway Station group, including interiors, as a local heritage item (Item 1400).

1.3.5 Summary of Heritage Listings

The following table provides a summary of the statutory heritage listings that apply to the study area:

ITEM NAME	STATUTORY LISTING	SIGNIFICANCE	ITEM NO.
Petersham Railway Station Group	State Heritage Register	State	01223
Petersham Railway Station Group	RailCorp S170 Heritage and Conservation Register	State	4801094
Petersham Railway Station group, including interiors	Inner West Local Environment Plan 2022	**State**	Schedule 5 Environmental Heritage #I1400

1.4 Project Methodology & Key Resources

This report has been prepared on the basis of the NSW Heritage Branch guideline for the preparation of Assessments of Heritage Impact. The principles contained in the Australian ICOMOS *Charter for the Conservation of Places of Cultural Significance (The Burra Charter)* 2013 are used as a methodology for assessing heritage impact.

In addition, the structure and contents of this report has been guided by the *Sydney Trains EMS-09-TP-0228 Statement of Heritage Impact Report Template.*

The State Heritage Register inventory database form for the *Petersham Railway Station Group* and S170 inventory form for *Petersham Railway Station Group* have been referenced throughout this report for the historical information and assessment of heritage significance. Additional information was sourced from the Sydney Trains plan room, where required, in order to provide information on the historical development and heritage significance of the site.

Physical investigation of the site was undertaken by Otto Cserhalmi, Katrina Blando and Rowan Day from OCP Architects in March 2023.

1.5 Project Limitations

This report does not consider indigenous cultural heritage significance. The physical inspection of the site did not involve the removal of fabric or any ground disturbance.

1.6 Authorship & Acknowledgements

This report was prepared by OCP Architects, written by Csilla Cserhalmi and reviewed by Rowan Day.

1.7 Terminology & Abbreviations

The following table provides a list of terms and abbreviations that have been used throughout this report:

Adaptation / Adaptive Reuse	Adaptation may involve additions to the place, the introduction of new services, or a new use, or changes to safeguard the place. Adaptation of a place for a new use is often referred to as 'adaptive re-use'. (Burra Charter Article 7.2)
Burra Charter	The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999.
Conservation	Means all the processes of looking after a place so as to retain its cultural significance (Burra Charter Article 1.1). Conservation can include 'maintenance', 'preservation' and 'restoration' works.
Heritage NSW	Heritage NSW, or its delegate. This was formerly the Heritage Division of the Office of Environment and Heritage (NSW OEH). In 2019, the NSW Heritage Office was integrated with the NSW Department of Premier and Cabinet.
Maintenance	Means the continuous protective care of the fabric and setting of a place and is to be distinguished from 'repair'. Repair involves 'restoration' or 'reconstruction' (Burra Charter Article 1.5).
Restoration	Means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material (Burra Charter Article 1.7).
Reconstruction	Means returning a place to a known earlier state and is distinguished from 'restoration' by the introduction of new material into the fabric (Burra Charter Article 1.8).
Preservation	Means maintaining the fabric of a place in its existing state and retarding deterioration (Burra Charter Article 1.6).
State Heritage Register (SHR)	A register of places that are considered to be of 'state' significance, and protected under the *Heritage Act 1977*.
S170	Section 170 of the *Heritage Act 1977*
S170 Register	Section 170 Heritage and Conservation Register, a heritage register of items owned and managed by a government agency, as required by the *Heritage Act 1977*

Transport & Infrastructure SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
IWLEP 2022	Inner West Local Environmental Plan 2022

PART B: HISTORY AND PHYSICAL ANALYSIS
2. HISTORICAL CONTEXT

The following historical overview of Petersham Railway Station was sourced from the NSW Office of Environment and Heritage SHR listing for the place:

The Main Western line to Parramatta Junction (Granville) was originally completed in 1855. The line opened on 26 September 1855 and was double track from Sydney to Newtown and then single track to Parramatta Junction (but duplicated in 1856). The line was built as a direct connection to Parramatta Junction and, subsequently, for the purpose of connecting Sydney with the major rural railways that were constructed across the Blue Mountains to Bathurst and across the Southern Highlands to Goulburn via Liverpool. There were few stops along the line between Sydney and Parramatta Junction and it was not the original intention of the line to serve suburban development. Changes to the line were more often related to the line's long distance purpose than to the communities along it.

Traffic to the west and south (and later north) of the state brought the need to amplify the line, first in 1891 when it was quadrupled and later in 1927 when it was sextupled (to Homebush) and electrified. With both of these major changes the earlier stations were usually entirely demolished and replaced with a new station. The 1927 work completed this process with the complete replacement of Strathfield and much of Newtown Stations. During this time suburban development also extended west along the line and these new stations were thus specifically designed as full-scale suburban passenger stations rather than rural 'halts'. The Engineer for Existing Lines, George Cowdery (appointed 1863), was a particularly strong influence on the architecture of this line, building particularly elegant stations in the late 1880s ahead of the 1891 quadruplication, in addition to replacing the original stone arch viaduct at Lewisham with iron truss bridges. Sextuplication in 1927 brought less change to most local stations (which were on the southern side), the new tracks being express ones on the northern side.

Petersham Station was opened on 6 January 1857 as a halt. A goods yard was established in 1882 and soon afterwards plans were prepared to quadruplicate the main line from Sydney to Homebush. This resulted in a further reorganisation of the Petersham yard so that the main station building was sited 'up' on the platform and a new iron footbridge was built to cross the new railway and connect up with a new island platform where the earlier building was demolished and replaced by an elegantly designed curved roof structure.

The new station building and footbridge were all designed by George Cowdery who was also responsible for the design of several other large and elaborate station buildings, including Newcastle (1876), Werris Creek (1883) and Cootamundra (1887). The plan of the station was based on the standard developed by John Whitton but the design and detailing of the station buildings and footbridge were much more elaborate than most station designs used elsewhere. In 1891 the present subway was built and another island platform building constructed to serve the slow tracks.

Additional land was purchased in 1911 for a large goods yard and, with a new goods shed built in 1913, made Petersham a major suburban station serving passengers and freight.

In 1926, the addition of a further two tracks and electrification as part of a second stage of the suburban electric train line service resulted in a major change to the way the station operated. The 1885 station building was closed and eventually became the offices of the District Signal Engineer. The other platform buildings were demolished and replaced by a brick building. The goods yard was gradually phased out and closed shortly after the second world war.

In 1954 the north wing of the 1885 building was taken over by the Railways and Tramways Hospital Fund, and the present eastern wing was added.

Figure 5: Railway station, Petersham showing line. Source: State Library of NSW collections file number FL1957714.

Figure 6: Petersham Railway Station, date unknown. Source: Mosman Local Studies

Figure 7: Railway bridge for passengers, Petersham, undated. Source: State Library of NSW collections file number FL8771104.

Figure 8: A view of the old station building, taken from nearby Terminus Street, 2008. Source: NSW Railnet

3. DESCRIPTION AND PHYSICAL EVIDENCE

Former Station Building (1885, 1954)

The former Petersham Station Building, a 'first class station building' is a symmetrical building in an ornate Italianate style with a high parapeted central block, a central tower, and flanked by lower supporting buildings. The main block is fronted to the south by a platform awning supported by cast iron columns with decorative cast iron lace work. The width of this platform has been reduced since it was decommissioned. The Terminus Street elevation is accessed via sandstone steps onto a veranda, supported on cast iron columns with decorative lacework, which spans the extent of the central block. An access door under this veranda has been created off the lower landing of the stone steps to the west. The exterior walls are face brickwork with painted moulded cement decorative elements. To the eastern end of the original building is a rendered brick extension. Infill sections have been constructed between the previously separate wings to the east and west and 2 garage doors under the eastern wing (there was previously a garage door located further to the east which has subsequently been bricked up).

Recent restorations have included new tuck pointing and the reinstatement of most of the doors and windows to the south elevation, although several remain non-operational. The works also saw the roof replaced in corrugated steel sheeting in place of the original slate. The oval vents to the roof were reinstated. These works have been undertaken in an appropriate and sensitive manner obviously with reference to the original architectural drawings.

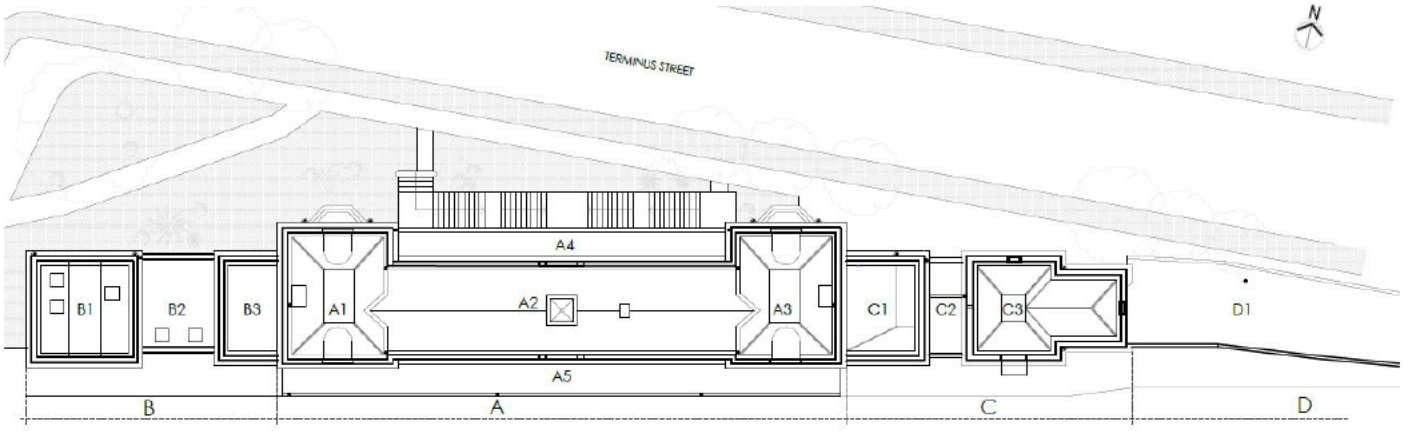


Figure 9: Existing roof plan of Former Station Building (OCP Architects, 2023)

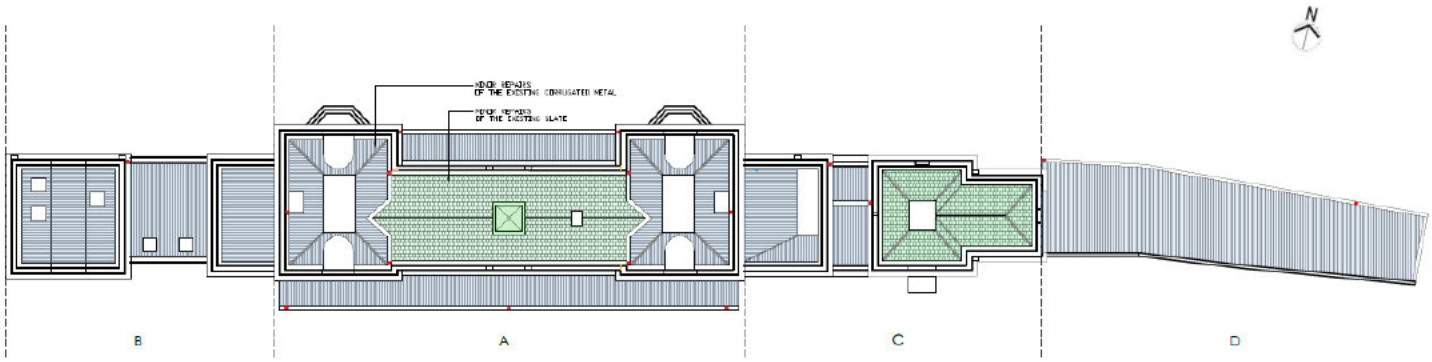


Figure 10: Existing roof plan of Former Station Building, showing roof sheeting types, location of downpipes and rainwater head (OCP Architects, 2023)

3.1 Photographs

All photographs below were taken on site by OCP Architects between March and May 2023, unless otherwise stated.

Figure 11: View of southern façade and roof from the platform (OCP, 2023)

Figure 12: View of southern side of the roof (OCP, 2023)

Figure 13: View of southern façade (OCP, 2023)

Figure 14: View of southern façade (OCP, 2023)

Figure 15: View of northern façade (OCP, 2023)

Figure 16: View of northern façade (OCP, 2023)

Figure 17: Existing corroded roof sheeting (OCP, 2023)

Figure 18: Evidence of poor flashings (OCP, 2023)

Figure 19: Curved dome lantern: evidence of lost detailing – likely originally timber louvred and glazed (OCP, 2023)

Figure 20: Parapets in poor condition (OCP, 2023)

PART C: HERITAGE ASSESSMENT AND IMPACT ASSESSMENT

4. ASSESSMENT OF HERITAGE SIGNIFICANCE

The assessment and summary statement of significance included below has been sourced from the NSW State Heritage register listing inventory for the subject site. Key parts of the text for consideration are highlighted in bold.[1]

4.1 Assessment of Significance

SHR Criteria a) [Historical Significance]	*Petersham Railway Station has State significance as the station with its group of largely intact, original structures dating from the 1880s establishment of the station through to the 1891 quadruplication and the 1927 sextuplication of the line, is able to demonstrate the growth and expansion of the railways in the late 19th and early 20th century. The extant 19th and 20th century platforms, buildings, footbridge, subway and signal box are collectively able to demonstrate important historical phases of suburban railway development.*
SHR Criteria b) [Historical Association]	*Petersham Railway Station is significant for its association with Engineer-in-Chief George Cowdery under whose direction the extant 1880s former station building and footbridge were designed, the design and detailing of the station building and footbridge being more elaborate than most station design used elsewhere.*
SHR Criteria c) [Aesthetic Significance]	*Petersham Railway Station has State aesthetic significance with its 1880s 'first class station building' which displays complicated roof forms, large symmetrical plan and awnings supported on cast iron columns. The building has a prominent presence to both Terminus Street and as viewed from the island platform and footbridge. The 1920s 'initial island' platform building is signficant with its design showing linear form, gable roof and integrated awnings. The 1880s footbridge with stairs leading down the platforms and streets has been altered considerably in terms of the*

[1] NSW Office of Environment and Heritage, State Heritage Inventory Listing for Petersham Railway Precinct, accessed August 2023 from: https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4801094

	recasting of the concentre stairs and deck and installation of new handrails and balustrades. However the footbridge has a number of 1880s elements namely brick piers, cast iron columns, arches, steel trestles and latticework to the deck and overall retains is aesthetic quality. *The signal box which dates from 1927 has technical significance as it contains all its signalling equipment demonstrating signalling technology of this era.*
SHR Criteria d) [Social Significance]	*The place has the potential to contribute to the local community's sense of place and can provide a connection to the local community's history.*
SHR Criteria e) [Research Significance]	*Petersham Railway Station has low archaeological research potential. Any potential remaining evidence which pertains to the 1891 men's toilet block under the footbridge and the booking office and stairs in the subway is not considered significant as it is not likely to provide information not available at other railway sites.*
SHR Criteria f) [Rare Assessment]	*Petersham Railway Station has rarity in terms of its 'first class station building' and the footbridge, with the station building being the only 'first class station building' in the Sydney area and the footbridge being the second oldest surviving footbridge in NSW and a unique example within the suburban network.*
SHR Criteria g) [Representative Assessment]	*The building on platform 1/2 which has been altered internally but it retains a high level of integrity to its exterior and is representative of a common form of standard platform building design. With seven bays the building is one of the larger examples of its type and is therefore an excellent representation of this type. The signal box at Petersham Railway Station has characteristic features of this type of signal box namely its elevated brickwork base, timber framed, fibre cement clad operating level structure and Dutch gable roof and has a high level of integrity as its original signalling equipment has been retained and it still has original fibre cement slate roof tiles, making it an excellent example.* *The footbridge was identified as an item of exceptional heritage significance in the 2016 'Railway Footbridges Heritage Conservation Strategy'. Although the footbridge has been altered in terms of the recasting of the centre stairs and deck and installation of new handrails and balustrades, the footbridge has a number of 1880s elements including brick piers, cast iron columns, arches, steel trestles, timber stair treads and latticework to the deck support. Overall the bridge retains its aesthetic quality and integrity.*
Integrity/Intactness	*Despite the moderate integrity of the island platform buildings and the limited integrity of the subway, overall the Petersham Station Group is assessed as having a high level of integrity based on the condition and intactness of the Terminus Street former station building, the footbridge and the signal box.* *FORMER STATION BUILDING (Terminus Street)* *The exterior of this building is largely intact and has been subject to extensive restoration in recent years. The offices which occupy the 1954 extension and a small section of the original 1885 building are not considered significant. While this*

extension to the west has little merit, it does not detract from the integrity of the main building. Likewise, infill sections are poorly executed but do not have a major impact on the integrity of the 1885 building. The interior contains many architectural features, both original and reproductions, which contribute to the significance and integrity of the building as a whole.

PLATFORM BUILDING (Platform 1/2)

While the exterior is mainly intact, the interior has been modified to meet ever-changing operational requirements. This, coupled with the fact that there a more intact examples of this type of platform building elsewhere, has reduced the integrity of this particular building.

SIGNAL BOX

The signal box is mostly intact with all its signalling equipment, original fibre cement slate tiles and weatherboard walls.

FOOTBRIDGE This structure is largely intact and has been subject to extensive restoration in recent years. Modern services such as lighting and CCTV have been installed yet they do not detract from the integrity of the bridge.

PEDESTRIAN SUBWAY There is not much evidence of the existing form or extent of the original subway, but it appears to be of low integrity.

4.2 Summary Statement of Significance

Petersham Railway Station has State significance as the station with its group of largely intact, original structures dating from the 1880s establishment of the station through to the 1891 quadruplication and the 1927 sextuplication of the line, is able to demonstrate the growth and expansion of the railways in the late 19th and early 20th century. The building serves to mark the alignment of the first railway in NSW, that being the 1855 Sydney to Parramatta line;

The 1880s former station building is the largest and most elaborate 19th century station building constructed for the Sydney suburban rail system and is the only major 'First Class' station building known to have been built in Sydney in the 19th century and is therefore unique in the history of the NSW Government Railways. It is a fine example of a late Victorian Italianate station dating from 1885, and although compromised by later alterations and additions is substantially intact and capable of restoration. The building is unusual and of significance by being reached from the street by a grand stair in the classical manner and having a landscaped forecourt to a suburban street and forms a major part of an important historic railway precinct including the bridge and signal box and is a significant landmark in this part of Petersham, which retains much of its 19th century built street character. The station is one of a select number of similar buildings designed by the office of the Engineer for the Existing Lines Branch, George Cowdery, with the 1883 iron pedestrian bridge and steps also designed by Cowdery.

The footbridge was identified as an item of exceptional heritage significance in the 2016 'Railway Footbridges Heritage Conservation Strategy'. Although the footbridge has been altered in terms of the recasting of the centre stairs and deck and installation of new handrails and balustrades, the footbridge has a number of 1880s elements including brick piers, cast iron columns, arches, steel trestles, timber stair treads and latticework to the deck support. Overall the bridge retains its aesthetic quality and integrity.

5. PROPOSED WORKS

5.1 Proposed Works

The works subject of this report outlined below represent measures intended to conserve the building by undertaking essential repairs to the roof and rainwater goods, and are based on the findings of the preliminary condition assessment, together with reports from the structural engineer, hydraulic consultant, roofing consultant, timber consultant, and arborist.

Roof A1

- Replace existing roof sheeting with new Welsh slates. Reinstate ridge cresting;
- Replace with new gutters in 180mm (currently 115mm);
- Provide new lead flashing;
- Replace all timber fascias matching existing;
- Renew hips in heavy lead;
- Replace flat roof in lead using traditional welted joints. Allow to replace base using marine plywood and new sarking;
- Replace valley in lead with new timber subbase;
- Patch timber scrolls to roof vent and cover in lead;
- Protect cornices with lead;
- Replace all downpipes.

Roof A2

- Retain Welsh Slates and allow for minor refixing (5%);
- Clean and maintain existing gutters, allow minor refixing, and provide new lead overflashings to parapets;
- Re-sheet onion dome in welted leadwork and reintroduce metal weather vane;
- Protection of parapet with lead capping;
- Protection of cornices with lead capping.

Roof A3

- Replace existing roof sheeting with new Welsh slates and reinstate ridge cresting;
- Replace with new gutters in 180mm (currently 115mm);
- Replace valley in lead with new timber subbase;
- Patch timber scrolls to roof vent and cover in lead;
- Protect cornices with lead capping;
- Replace all downpipes.

Roof A4

- Replace roof sheeting with galvanised steel custom orb sheeting;
- Replace existing gutters with new gutters in 180mm (currently 115mm);
- Replace existing flashing with lead flashing;

- Provide overflow to parapets.

Roof A5

- Replace galvanised steel sheeting with new Welsh slates;
- Replace galvanised steel flashing with new lead flashing;
- Replace lead overflashing with new lead flashing;
- Clean and retain gutters;
- Replace all downpipes;
- Reinstate original drainage detail with downpipe incorporated into the awning post and gargoyle styled small rainwater heads.

Roof B1

- Re-screw, treat rust and repaint curved section of flat roof sheeting;
- Fixed timber louvred vents with glazing to match original detailing;
- Renew existing flashing in lead;
- Clean and maintain box gutters, and renew flashing in lead;
- Patch all cracks to parapets and re-render and provide lead cover (parapet may require pinning, refer to structural engineer advice). Allow to remove biological growth and desalinate;
- Increase the size of sumps and install new leadwork.

Roof B2

- Renew sheeting on new marine plywood base;
- Remove existing skylights and install two new skylights with similar proportions to original;
- Patch all cracks to parapets and re-render and provide lead cover (parapet may require pinning, refer to structural engineer advice);
- Replace existing gutters with new gutters in 180mm ogee profile;

Roof B3

- Clean and maintain existing box gutters;
- Retain existing roof sheeting;
- Renew flashing in lead;
- Replace downpipes with new 150mm diameter downpipes.

Roof C1

- Allowance for helical ties and re-rendering of brick rendered parapet wall. Repoint mortar joints and provide new lead cover (cracks on parapet: refer to structural engineer advice);
- Retain existing roof sheeting;
- Replace flashing in lead;
- Replace existing flat roof section in lead roll roof;
- Clean and maintain existing box gutters.

Roof C2

- Clean and re-screw existing roof sheeting. Replace north sub-roof at greater pitch (with rolls in lead);
- Replace existing flat roof section in lead roll roof;
- Replace existing gutters with new gutters in 180mm;
- Replace existing air vents and allow for lead overflashing, lead sleeve and lead-burned slate base.

Roof C3

- Retain existing gutters;
- Retain existing roof tiles;
- Replace zinc overflashing with lead overflashing;
- Retain flat section of roof;
- Replace existing gutter nozzle with new sump in lead;
- New rainwater heads to replace existing corroded galvanised steel rainwater heads.

Roof D

- Re-screw, treat rust and repaint existing roof sheeting;
- Retain existing roof flashing;
- Repaint fascia.

Terminus Street Façade

- Allow to clean exterior walls and desalinate and repaint base;
- Repaint quoins;
- Repaint timber elements;
- Repoint entry steps with traditional lime mortar;
- Clean all vents and allow to replace two vents with cast iron or aluminium replicas;
- Repaint windows and allow to re-putty and reglaze in toughened laminated glass. Ensure all windows are operable;
- Repaint doors and allow to re-putty and reglaze in toughened laminated glass;
- Allow to repaint verandah posts.

Platform Façade

- Allow to clean exterior walls and desalinate and repaint base;
- Repaint quoins;
- Repaint timber elements;
- Repaint window and door surrounds;
- Clean all vents and allow to replace one vent with cast iron or aluminium replica;
- Repaint windows and allow to re-putty and reglaze in toughened laminated glass. Ensure all windows are operable;
- Repaint doors and allow to re-putty and reglaze in toughened laminated glass;
- Allow to repaint verandah posts.

Railway Institute Building

- Clean, desalinate and repaint exterior walls. Structural engineer to advise on localised cracking;
- Repaint windows and allow to re-putty and reglaze in toughened laminated glass. Allow to replace 30% of timber elements. Replace rusted security bars with woven brass mesh screens to 20th century extension. Ensure all windows are operable;
- Repaint doors and ensure all hardware is operable.

Exterior – Western Façade

- Clean exterior walls and desalinate and repaint base;
- Repaint quoins;
- Repaint timber elements.

Refer to Schedule of Works and Architectural Drawings by OCP Architects, August 2023, for a detailed description of proposed works. The works and their impact are summarised in the following table in Section 6.

6. HERITAGE IMPACT ASSESSMENT

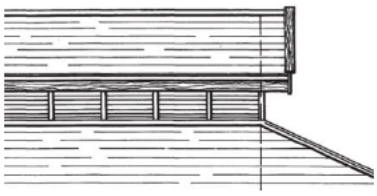
In summary form this section assesses how the proposed works to Petersham Railway Station impact the heritage significance of the site.

The works are a positive step that are in line with the requirement for minimum standards of maintenance and repair under the *Heritage Act 1977*.

The following paragraphs provide a summary assessment of the impact of the proposed works on the heritage significance of Petersham Railway Station Group, with the table below showing an itemised assessment of works, significance, impacts to fabric, and where relevant, exemption clauses for approval:

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
Galvanised steel roof sheeting	Replace with Welsh slates and reinstate ridge cresting.	Modern	Corroding badly	Positive. Reconstruction of lost fabric and elements to match original detailing.
Welsh slate roof sheeting	Retain and refix loose slates.	Modern	Some slates are loose. Graffiti damage	Positive. The refixing of loose slates is an important safety measure to ensure that loose slates do not fall on communters and protects the building against water ingress.
Flat roof sections	Retain.	Modern	Sound condition	Positive. Existing roof sections to be retained.
Gal capped flat roof sections	Replace in lead. Replace base with marine plywood and new sarking.	Modern	Fair condition	Postive. The replacement of modern gal capped roof sections will ensure the building is protected from water ingress.

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
Eaves gutters	Replace gutters with new 180mm gutters.	Modern	Corroded and insufficient to size to operate effectively in heavy rains	Positive. New gutters will allow for greater capacity and allows for increase in downpipe size. This will protect the building from water ingress.
Box gutters	Clean and maintain.	Modern	Filled with leaves	Positive. Existing gutters are to be cleaned. Leaves and debris in gutters can cause issues with drainage and can impact the fabric of the building.
Downpipes	Replace downpipes with 150mm diameter galvanised downpipes.	Modern	Fair	Positive. New downpipes will allow for greater capacity. This will protect the building from water ingress.
Rainwater heads	Replace corroded galvanised steel rainwater heads with traditional ogee shapes rainwater heads with overflow and sleeves.	Modern	Poor	Positive. Modern rainwater heads are badly corroded and require replacement. The proposed rainwater heads will be reconstructing earlier details and will also provide measures to further protect the building from water ingress with the intoduction of overflows.
Lead flashings	Replace or renew lead flashings.	Early/Modern	Poor	The works to flashings will involve removal of some early fabric. However, lead flashings that are in poor condition can result in water penetration into the building. Therefore, repairing and, in some instances, replacing lead flashings will ensure the building is protected from water ingress.
Timber fascias	Replace with new seasoned Western Red Cedar.	Original	Split and worn, poor condition	The works to timber fascias will involve removal of original fabric. However the condition of the fascias is so poor that replacement of the fabric is seen as a necessity. The fascias will be reconstructed to match existing detailing with quality timber to ensure the reconstruction is both accurate and durable.
Hips	Renew galvanised steel hips in heavy lead.	Modern	Poor/Fair	Positive. Galvanised steel hips are to be replaced with lead to ensure the building is protected from water ingress.
Valleys	Replace galvanised steel valleys with lead in new timber subbase.	Modern	Poor/Fair	Positive. Valleys are to be replaced in lead with new timber valley boards to ensure the building is protected from water ingress.

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
Cornices	Repair and desalinate cornices and protect with lead.	Original	Fair	Positive. Original cornices are to be retained and repaired, treated to remove salt, and protected with lead to ensure longevity of original fabric.
Parapets	Clean, desalinate, patch, repair and repaint parapets. Remove biological growth. Protect with lead and provide overflows.	Original	Poor	Positive. The parapets are badly cracked with evidence of biological growth. The cleaning, repair and protection measures for this highly significant fabric is important to ensure the longevity of original fabric.
Brick rendered parapet wall	Structural repairs, repointing of mortar joints and lead protection.	Original	Poor	Positive. The cracks on the wall are seen as potentially structurally unsafe and repairs are necessary to prevent damage to the fabric and risk of future degradation of the building.
Onion dome	Reconstruct original leadwork to replace modern galvanised sheeting and reintroduce metal weather vane.	Modern	Fair	Postitive. Reconstruction of lost fabric and elements to match original detailing.
Roof vent (timber scrolls)	Timber scrolls to roof vent require patching and protection with lead.	Original	Poor	Positive. Repairs and protection to the timber scrolls are seen as a necessary measure to ensure the longevity of the building fabric.
Curved dome lantern sheeting to roof B1	Allow for new timber frame with fixed glazed louvered vents to vertical sections of curved dome roof.	Modern	Poor	Positive. This is seen as positive step in reconstructing typical detailing from the era of the building. Timber louvered vents with glazing are seen as a more appropriate detail for this section of the roof and will replace corroded modern fabric that is in poor condition. Refer to Figure 19 for existing metal which has been installed. Refer to image below for concept drawing of the proposed louvred vents. 

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
Gutter nozzles	Provide new sumps to replace gutter nozzles.	Modern	Fair	Positive. The provision of new sumps is a measure to ensure that water flows away from the building.
Skylights	Replace modern skylights that are in poor condition.	Modern	Poor	Positive. The replacement of skylights with new skylights with similar dimensions will ensure that modern fabric in poor condition is replaced.
Awning post detail	Reinstate original drainage detail with downpipe incorporated into the awning post and gargoyle styled small rainwater heads.	Original	Missing	Positive. The proposed drainage detail, downpipe and rainwater heads will be a reconstruction of the original drainage method of the station building. The reconstruction will be assisted with original architectural drawings of the awning.
Vents	Allow to replace damaged vents (cast iron or aluminum replica 230 x 150mm). Clean existing vents to ensure operational.	Original	The existing vents are not operational, some have been compromised by rising platform / ground levels.	Positive. Will improve building ventilation and alleviate the likelihood of damp-driven deterioration.
Walls generally	Allow to clean exterior walls and desalinate and repaint base. Repaint quoins, timber elements.	Original / Early. High significance	Generally fair. Peeling paint, flaking and peeling plaster in areas	Positive. The cleaning and repainting of painted elements will protect the fabric of the walls and improve the overall appearance of the building. No adverse impact.
Windows generally	Repaint windows and allow to re-putty and reglaze in toughened laminated glass. Ensure all windows are operable.	Original / Early. High significance	Generally fair. Peeling paint, flaking and peeling plaster in areas	The repainting of timber windows will protect the fabric of the windows and improve the overall appearance of the building. Reglazing with toughened laminated glass is a security measure that reduces likelihood of cracking and breakage. No adverse impact.
Installation of security mesh to	Allow to remove all security bars and replace with double woven brass mesh screens, that are	N/A	N/A	The proposed brass woven wire security screens represent the introduction of new fabric. However, it allows windows to be securely

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
windows on 20th century addition	located on ground level windows to Terminus Street; and Platform side elevation. If any of these windows do not have security bars, allow for new double woven brass mesh security screen.			opened up to let in natural light whilst reducing risk of vandalism. The proposed screens are an accepted and discreet design that has been used at multiple NSW railway stations. Their introduction, in preference to the existing intrusive security screens, is considered positive. An example of the mesh recently installed at Gunnning Railway Station is included below.  
Doors generally	Repaint doors and ensure all hardware is operable. Allow to re-putty and reglaze existing glazing with toughened laminated glass.	Original/Early	Fair	The repainting of timber doors will protect the fabric of the doors and improve the overall appearance of the building. Reglazing with toughened laminated glass is a security measure that reduces likelihood of cracking and breakage. No adverse impact.
Entry steps	Repoint entry steps with traditional lime mortar.	Early	Steps: fair Mortar: poor	Positive. The repointing of the steps is important to ensure the steps are structurally sound. The new

FABRIC	SCOPE OF WORKS ITEM	DATE OF FABRIC / SIGNIFICANCE	PHYSICAL CONDITION	IMPACT OF WORKS
				traditional lime mortar will prevent accumulation of dirt and water in joints, which could damage the fabric and lead to cracking/movement.
Verandah posts	Allow to repaint verandah posts.	Original	Good	The repainting of timber verandah posts will protect the fabric of the posts and improve the overall appearance of the building. No adverse impact.
Sewer lines	Allow for sewer lines to be re-lined.	Early	Poor	Positive. The hydraulic consultant has recommended that the sewer be relined to extend the operational use of the sewer asset and eliminate the high cost and impact of civil excavation to repair or replace the sewer.
Paint scheme	Repainting of walls, ceilings, windows, doors.	Existing paint scheme is not original	Fair, with some poor elements	Currently the scope is to paint elements to match the existing colour scheme. The proposed paint colour scheme is currently to match existing. The final scheme is to be agreed in consultation with TfNSW Heritage and no painting is to be undertaken prior.

The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:

- The works are a positive approach to repairing and maintaining the highly significant former Petersham Station Building. The measures are necessary to prevent further deterioration and ensure the longevity of the station buildings and address the deterioration of significant fabric. The works follow a detailed Condition Assessment and investigation by structural engineer, hydraulic consultant, roofing consultant, timber consultant, arborist, and heritage architect. Conservation of fabric such as roof elements, rainwater goods, fascias, cornices, façade walls, doors and windows throughout the building are all seen as positive heritage outcomes, while maintenance works including painting and cleaning are in line with obligations for minimum standards of maintenance and repair. The proposed paint colour scheme is currently to match existing. The final scheme is to be agreed in consultation with TfNSW Heritage and no painting is to be undertaken prior.

- The proposed reconstruction measures include the replacement of modern roof sheeting with Welsh slates and the reinstatement of ridge cresting, together with the reconstruction of awning post downpipe detailing with gargoyle styled rainwater heads and the proposed reconstruction of

timber louvred vents and glazing to roof B1. These measures will reintroduce lost detailing of the former station building and are seen as a positive enhancement to the appearance of the building and the significance of the place.

- The proposed replacement of modern fabric will include fabric such as larger gutters with traditional profiles have been proposed to allow for greater capacity and allows for an increase in the downpipe sizes. New downpipes with larger diameters have also been proposed. Moreover, new leadwork has been suggested to replace existing leadwork in poor condition, and to replace other materials that do not provide the same level of protection to the building. New sumps have also been proposed to ensure water falls away from the building. These measures have been proposed to ensure that the roof structure and leadwork can accommodate heavy rains and protect the building against water ingress and protecting the item's significance.

- Where replacement fabric is proposed due to deterioration is it proposed that a like-for-like match be chosen, with high quality materials.

The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:

- No elements of the proposed works have been identified as detrimentally impacting on the heritage significance of the place. Rather, the proposed works including repair of significant fabric and removal of intrusive elements will result in a significant enhancement of the building fabric and ensure the building is maintained and protected to protect its overall significance.

- The partial replacement/reconstruction of the timber fascias will involve removal of original fabric. However, the condition of the fascias is so poor that replacement of the fabric is seen as a necessity. The fascias will be reconstructed to match existing detailing with quality timber to ensure the reconstruction is both accurate and durable. The works to leadwork will also involve removal of some early fabric. However, lead flashings that are in poor condition can result in water penetration into the building. Therefore, repairing and, in some instances, replacing lead flashings will ensure the building is protected from water ingress.

7. RECOMMENDATIONS & MITIGATION MEASURES

7.1 Recommendations

The following recommendations have been made to provide guidance for the maintenance and repair work to Petersham Railway Station in order to mitigate any potential adverse heritage impacts associated with the works.

- Work is to be undertaken with the objective of leaving intact as much as practically possible;
- Permanent removal of heritage fabric that is not specified above is not permitted. If removal of any heritage fabric is required, seek advice from the Sydney Trains Heritage Specialist;
- Ensure that all significant fabric of the station is treated with care during works. If required, cover significant fabric in areas of remediation works for protection. Moveable heritage items may

require temporary relocation, however, these items must be returned after the completion of works;

- Any accidental damage caused to heritage items/fabric must be reported immediately to the Project Manager and Sydney Trains Heritage Specialist. Damage is to be made good in accordance with specialist heritage advice.
- Where earlier details are exposed during building works notify the Sydney Trains heritage specialists. They may advise that original fabric/ features be reinstated.
- All areas affected by the work must be cleaned and made good after completion of works (including removal of site debris, cleaning all affected surfaces, painting to match existing surrounds).
- Follow instructions of Schedule of Works report and adhere to all hold points.
- All contractors and subcontractors involved in the construction works should be briefed on the heritage significance of the building prior to work commencing.
- All work involving heritage fabric should be carried out by tradespeople with experience working on heritage structures.

7.2 Conclusion

This Statement of Heritage Impact has reviewed the proposed works to Petersham Railway Station. The assessment contained within this report has found that the proposed works will have a positive impact on the heritage significance of Petersham Railway Station.

The proposed initiatives are aligned with heritage conservation objectives. The works are considered positive in facilitating preventative measures to proactively safeguard the building's integrity against water infiltration, whilst also repairing damaged building elements, aiming not only to restore the building but also to extend its longevity. Furthermore, the works include the careful reconstruction of heritage features that have been lost over time, and where deemed necessary, replacement of contemporary materials with those reminiscent of the building's original design. The proposal also includes measures to ensure the building is safeguarded against unauthorised access.

Specific elements, notably the degraded sections of timber fascias and leadwork, necessitate replacement due to their present state of deterioration. Nevertheless, the restoration process will employ “like” materials, replicating both their visual detailing and utilising equivalent, high quality fabric wherever replacement is deemed necessary.

The works, as proposed, are considered the most effective in terms of repair methodology, in terms of preventative measures to allow the building to be maintained and last, and the most appropriate means of conservation of the station building.

Upon following the recommendations outlined in Section 7.1 above, the proposed works are considered to be acceptable from a heritage perspective and are broadly consistent with the requirements of the *Heritage Act 1977* and the best practice heritage guidelines advocated by *The Burra Charter 2013.*

The proposed works exceed the rail-specific exemptions gazetted for use by Sydney Trains on 13 March 2015 under the NSW *Heritage Act 1977*. It is a requirement that Sydney Trains submit a S60 application to Heritage NSW for approval to carry out these proposed changes to the SHR-listed site.