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METRO

HERITAGE MANAGEMENT PLAN

Sydney Metro SWM4

Design and Construction of
Errant and Hostile Vehicle
Mitigation Treatments for
the Southwest Metro Project

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TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	Context and Scope of this Sub-plan	5
1.2	Project Background	5
1.3	Objectives and Targets.....	10
1.4	Consultation.....	10
2	LEGAL AND OTHER REQUIREMENTS	16
2.1	Guidelines	18
2.2	Conditions of Approval	18
2.3	Roles and responsibilities	18
3	EXISTING ENVIRONMENT	22
3.1	Context	22
3.2	Aboriginal Heritage	22
3.3	Built Heritage	23
3.4	Non-Aboriginal Archaeology	25
4	CONSTRUCTION RISK ASSESSMENT	26
5	MANAGEMENT MEASURES	28
5.1	CEMP Aboriginal Archaeological Management	28
5.1.1	Aboriginal Cultural Heritage Assessment Report	28
5.1.2	Human Remains	28
5.1.3	Unexpected Finds	28
5.1.4	Clearance	29
5.1.5	Reporting	29
5.2	Built Heritage Management	29
5.2.1	Design Requirements	29
5.2.2	Conservation/Heritage Architect	29
5.2.3	Archival Photographic Recording	29
5.2.4	Heritage Interpretation	29
5.2.5	Adaptive Reuse	29
5.2.6	Moveable Heritage	30
5.2.7	Significant Fabric Register	30
5.2.8	Works Methodologies	30
5.2.9	Heritage Engineer	30
5.2.10	Skilled Tradespeople	30
5.2.11	Exclusion Zones	30
5.2.12	Works On Significant Fabric	31
5.2.13	Heritage Consultant Advice	31
5.2.14	Landscape Plan	31
5.3	Non-Aboriginal Archaeological Management.....	31
5.3.1	Archaeological Zoning	31
5.3.2	Archaeological Management	33
5.3.3	Archaeological Method Statement	33
5.3.4	Excavation Directors	33
5.3.5	Unexpected Finds	33
5.3.6	Clearance	33
5.3.7	Human Remains	34
5.3.8	Storage Of Archaeological Remains	34
5.3.9	Analysis And Reporting	34
5.4	Heritage Awareness Training and Induction	35
5.5	Ongoing Notifications – Unexpected Finds	35

All notification and consultation records will be kept by Martinus and their relevant consultants.	36
6 MANAGEMENT ACTION CHECKLIST	37
7 MONITORING, AUDITING AND REPORTING	45
7.1 Compliance	45
7.2 Archaeological Monitoring	45
7.3 Archaeological Reporting	45
8 REVIEW AND IMPROVEMENT	46
8.1 Enquiries, Complaints and Incident Management	46
9 HMP ADMINISTRATION.....	47
9.1 Hold Points	47
9.2 Records	47
APPENDICES	48
APPENDIX A – Other Conditions of Approval, Revised Environmental Mitigation Measures and CEMF Requirements Relevant to this Plan.....	49
APPENDIX B – Statement of Heritage Impact.....	60
APPENDIX C – Registered Aboriginal Parties.....	61
APPENDIX D – Sydney Metro Unexpected Heritage Finds Procedure	62
APPENDIX E – Consultation Evidence.....	63

TABLES

Table 1: Assessment of impacts to heritage items near work locations.....	6
Table 2: Consultation carried out in the development of this Plan	12
Table 3: Legislation and Planning Instruments	16
Table 4: Roles and responsibilities	18
Table 5: Road/Rail Overbridges and Heritage Listings	23
Table 6: Aboriginal Heritage – Aspects, Impacts and Risks	26
Table 7: Built heritage – Aspects, Impacts and Risks	26
Table 8: Non-Aboriginal Archaeology– Aspects, Impacts and Risks.....	26
Table 9: Management Action Checklist	37
Table 10: HMP hold points.....	47

FIGURES

Figure 1: Sydney Metro route map	10
Figure 2 Location of S2B PAD01	23
Figure 3: Metro development corridor with stars indicating the overbridges along the route (Source: Heritage Impact Memo 240053, Artefact 2024).....	24
Figure 4: Marrickville Station Catchment Archaeological Management Zones	32
Figure 5: Belmore Station Catchment Archaeological Management Zones.....	32

1 INTRODUCTION

1.1 Context and Scope of this Sub-plan

This Heritage Management Plan (HMP or Plan) forms part of the Construction Environmental Management Plan for Southwest Metro – Errant and Hostile Vehicle Mitigation Treatments for the Southwest Metro (the Project). The scope for the Project generally includes:

Errant vehicle mitigation (EVM) treatments consisting of:

- *Eight (8) station overbridge barriers*
- *Seven (7) non-station road-over-rail overbridge barriers; and*
- *67 non-bridge locations along the southwest corridor*

Hostile vehicle mitigation (HVM) treatments in the eight (8) station precincts

Other works

Road upgrades (kerbside ramps) across various locations

Fencing, finishing works and other streetscaping elements across various locations

Remediation works.

This HMP has been prepared to address the requirements of the Conditions of Approval (CoA), the Revised Environmental Mitigation Measures (REMM) and the Sydney Metro Construction Environmental Management Framework (CEMF).

This HMP describes how Martinus proposes to manage and protect Aboriginal and non-Aboriginal heritage during the construction of the Project. The HMP describes how Martinus will ensure risks associated with heritage management are considered and managed effectively during the construction of the Project. It has been prepared to support, and should be read in conjunction with the Sydney Metro CEMF as well as a number of Sydney Metro and Martinus' prepared heritage related plans and procedures.

1.2 Project Background

The Sydney Metro City and Southwest – Sydenham to Bankstown Environmental Impact Statement (EIS) (GHD/AECOM September 2017) assessed the impacts of construction and operation on non-Aboriginal heritage and Aboriginal heritage within Chapter 14 (Non-Aboriginal heritage) and Chapter 15 (Aboriginal heritage) respectively. The Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report (SPIR) (GHD/AECOM June 2018) was prepared in response to the submissions received during the EIS exhibition period. The SPIR revised the scope of the Sydenham to Bankstown Upgrade project, resulting in an overall reduction of potential heritage impacts during construction and the updated Non-Aboriginal Heritage Assessment was included in SPIR Appendix F.

Martinus, on behalf of Sydney Metro, engaged Artefact Heritage to provide desktop assessments and heritage advice relating to conducting site investigations for the design of the Project. The Heritage Impact Memo report assessed the significance of the heritage items in the Project area which is outlined in Table 1 below. These items and their associated heritage status are further outlined in Section 3.3. The non-Aboriginal archaeological potential of these sites is discussed in Section 3.4.

Table 1: Assessment of impacts to heritage items near work locations

Heritage item	Relevant work locations	Impacts
Inter-War Group Heritage Conservation Area—Hollands Avenue; Jocelyn Avenue and Woodbury Street	Livingstone Rd Bridge	Physical: Neutral. Works would be located outside of the heritage item.
		Visual: Neutral. The works on Livingstone Road Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
Turpentine - Ironbark Forest Understory	CI-019 Wardell Rd Bridge	Physical: Neutral. The new rail barrier would be located in the same location as the existing fencing. The existing vegetation associated with the heritage item would not need to be removed to facilitate the installation. The vegetation also would not be impacted by the adjacent bridge works on Wardell Road
		Visual: Negligible. The new rail barrier would be installed within the curtilage of the heritage item, which would be taller than the existing fence in this location. However, the significant vegetation present would still be visible, and the installation of rail barriers in the same location of the existing fence would generally be visually consistent with the existing setting. Similarly, the throw screen, bollard, and footpath treatment works on Wardell Road Bridge would not adversely effect the visual setting of the heritage item
		Archaeological: Nil. No potential archaeological remains have been identified in association with the heritage item
Gladstone Hall, including interiors	CI-027	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new rail barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of rail barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
Duntroon Street Heritage Conservation Area	Garnet St Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The works on Garnet Street Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
Crinan Street Shops Heritage Conservation Area	Duntroon St Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage

Heritage item	Relevant work locations	Impacts
Floss Street Heritage Conservation Area	Duntroon St Bridge	Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
		Physical: Neutral. Works would be located outside of the heritage curtilage
Inter war building - The Chambers	Duntroon St Bridge	Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the northern edge of the conservation area and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
		Physical: Neutral. Works would be located outside of the heritage curtilage
Melford Street Heritage Conservation Area	Melford St Bridge	Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the northern side of the heritage item. There would be no interruptions to the views to or from the heritage item, and would not adversely affect views between the surrounding conservation area and nearby station
		Archaeological: Nil
		Physical: Neutral. Works would be located outside of the heritage curtilage
Inter-War Hotel (former Hotel Canterbury)	Canterbury Rd Bridge	Visual: Neutral. The works on Melford Street Bridge would only be visible from the southern edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
		Physical: Neutral. Works would be located outside of the heritage curtilage
Federation Post Office Building (former Canterbury Post Office)	Canterbury Rd Bridge	Visual: Neutral. The works on Canterbury Road Bridge would only be visible from a small portion of the heritage item, and would not interrupt views to or from the heritage item
		Archaeological: Nil
		Physical: Neutral. Works would be located outside of the heritage curtilage

Heritage item	Relevant work locations	Impacts
Federation house	CI-058	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new rail barrier would not interrupt views towards the heritage item, and due to surrounding vegetation and buildings the barrier would only be visible from the northern edge of the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of rail barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
Federation villa	CI-060	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new concrete barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of concrete barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
Inter war commercial building - Station House	CI-061	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new concrete barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor that is partially obscured by vegetation, so the installation of concrete barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
Campsie Station	CI-075 and CI-077	Physical: Neutral. A short section of new rail barrier would be installed within the western margin of the s170 curtilage of the station (outside of the LEP curtilage). The barrier would be limited to the rail corridor however and would not impact any significant fabric
		Visual: Negligible. The new rail barrier would be installed within the curtilage of the heritage item, and since it would start about 13m from the end of the platform it would be visible to the public. However, this would only affect a small part of the overall station group, and it would replace an existing fence in the same location. It would be consistent with overall setting of the station group, and as result the visual impact would be minimal
		Archaeological: Nil. Campsie Station was identified as being part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential. Only localised ground disturbance would be required to install the rail barrier; therefore it is expected that there would be little to no impacts to significant archaeology
Federation House (former station master's cottage)	Burwood Rd Bridge	Physical: Neutral. Works would be outside of the heritage curtilage

Heritage item	Relevant work locations	Impacts
		Visual: Neutral. The planned bollards and concrete barrier on Burwood Road Bridge would not interrupt views to and from the heritage item, with current views being partially obscured by existing vegetation. They would not interrupt the visual relationship between the former station master's cottage and Belmore Station on the other side of the road Archaeological: Nil
Post-war bus shelter and public lavatories	CI-086 Burwood Rd Bridge	Physical: Neutral. Works at CI-086 would be located along the southern edge of the heritage curtilage about 13m south of the bus shelter and lavatory structures, while the Burwood Road Bridge works would be about 25m away from the structures Visual: Negligible. New fencing would be installed along the edge of the heritage item. However, existing fencing is already present along the edge of the rail corridor, therefore, the installation of new barriers in the same location would be consistent with the existing setting. Views to the significant structures would not be interrupted by the new barriers. Similarly the planned bollards and concrete barrier on Burwood Road Bridge would be in keeping with the existing setting, and views towards them from the bus shelter and public lavatories would be partially obscured by the station buildings Archaeological: Nil. No potential archaeological remains have been identified in association with the heritage item
Lakemba Pumping Station (WP0003)	CI-121	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The new rail barrier would only be visible from the northern edge of the heritage item and would not interrupt views towards the heritage item. There are existing fences along the boundary of the heritage item and the station on the opposite side of the road, so the installation of rail barriers in the same location would be visually consistent with the existing setting Archaeological: Nil
War memorial and street trees	CI-135	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The new rail barrier would be fully obscured except along the northern edge of the heritage item and would not interrupt views towards the heritage item. There is an existing fence along the boundary of the rail corridor so the installation of rail barriers in the same location would be visually consistent with the existing setting Archaeological: Neutral
S2B PAD01	CI-085	Archaeological: Nil. Installation of the rail barrier would require ground penetrations. However, the new rail barrier will adhere to the existing rail fence alignment and will not extend into the footprint of S2B PAD01. Therefore, potential subsurface Aboriginal objects associated with S2B PAD01 would not be impacted



Figure 1: Sydney Metro route map

1.3 Objectives and Targets

The HMP provides the basis for the management of heritage issues and aims to minimise the risk of impact during the course of the development, and to mitigate any impact that cannot be avoided. Mitigation and management measures are outlined in Table 9.

The objectives and targets of heritage management and mitigation are outlined below:

Minimise impacts on items or places of heritage value;

Avoid accidental impacts on heritage items;

Maximise worker's awareness of Aboriginal and non-Aboriginal heritage;

No disturbance or damage to known heritage sites or items, beyond that approved by the SSI Approval;

Unknown or undocumented heritage items are not knowingly destroyed, defaced or damaged;

Consult with Registered Aboriginal Parties and other identified stakeholders prior to impacts in areas which have been assessed to possess archaeological potential, and/or upon the discovery of unexpected Non-Aboriginal and Aboriginal objects or cultural features;

Any historical relics found on site shall be kept safe for consideration for incorporation into interpretation within the public domain—within the proposed site fixtures as may be supported by the Interpretation Strategy and Plan; and

No harm, destruction or defacement of human remains, including Aboriginal burials, will occur.

These objectives conform to Sydney Metro's objectives as described in the CEMF.

1.4 Consultation

CoA C3(d) requires that the HMP be prepared in consultation with the relevant Councils and Department of Premier and Cabinet Heritage NSW (formerly Heritage Division) as delegate for the NSW Heritage Council. As such the following stakeholders have been consulted with in developing this HMP:

Heritage NSW

Inner West Council

City of Canterbury Bankstown

A summary of the consultation is provided below within Table 2.

Table 2: Consultation carried out in the development of this Plan

CoA	Agency Consultation	Requirements & Date Submitted	Key issues raised	Response	HMP Section Reference
C6	Department of Planning, Housing and Infrastructure (DPHI)	Requirement: Review and comment on this HMP Date submitted: 24/08/2024	None.	Acceptance of the Heritage Management Plan	Appendix E
C3(d)	Department of Premier and Cabinet Heritage NSW (formerly Heritage Council)	Requirement: Review and comment on this HMP Date submitted: 04/08/2024	None.	Acceptance of the Heritage Management Plan	Appendix E
C3(d)	<i>Inner West Council</i>	Requirement: Review and comment on this HMP Date submitted: 12/07/2024	Only an overview of works has been provided. Further information regarding the extent of the demolition, works, and exact locations of the works proposed would be required to fully assess the heritage impacts on Heritage Items and Heritage Conservation Areas within the Inner West Local Government Area.	The intention of the Heritage Management Plan is to outline how Martinus will manage heritage matters across the project. Heritage impacts were assessed as part of the SSI 8256 Environmental Impact Statement (EIS), with additional assessment carried out as design progresses to minimise impact and confirm the work is consistent with the approved project. Martinus is currently drafting a Statement of Heritage Impact to compliment the Heritage Management Plan. As we approach finalised design for the project, the Statement of Heritage Impact will be completed accordingly. Once completed, Martinus are able to share the Statement of Heritage Impact with Inner West Council for information.	N/A

CoA	Agency Consultation	Requirements & Date Submitted	Key issues raised	Response	HMP Section Reference
			Amending the report to be in accordance with the guidelines for assessing heritage significance by the NSW Heritage Office is suggested, identifying (a) historic significance, (b) historical association, (c) aesthetic/creative/technical achievement, (d) social, cultural, and spiritual, (e) research potential, (f) rare, and (g) representative.	Martinus will look to incorporate elements of Assessing heritage significance - Guidelines for assessing places and objects against the Heritage Council of NSW criteria, within the Statement of Heritage Impact that is currently being prepared.	N/A
			It is unclear the intent of the Unexpected Heritage Item criteria, as the Heritage items are not considered to be 'unexpected' as they are listed in LEP schedules, on the State Heritage Inventory, or on agency Section 170 registers.	The intent of the Unexpected Heritage Item criteria is to be implemented within areas where there is a higher likelihood of potentially finding unknown items of heritage significance.	Section 5.1.3 Section 5.3.5
C3(d)	City of Canterbury Bankstown	Requirement: Review and comment on this HMP Date submitted: 12/07/2024	No comment. NOTE: The report should however be referred to Council's Aboriginal Liaison Officer for review and comment (if not already done so) given there are Aboriginal	CBC may distribute the HMP with CBC's Aboriginal Liaison Officer.	N/A

CoA	Agency Consultation	Requirements & Date Submitted	Key issues raised	Response	HMP Section Reference
			management measures proposed.		

REMM AH1 requires that Aboriginal stakeholder consultation be undertaken. Consultation with Registered Aboriginal Parties (RAP) was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during the preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR). No further RAP consultation is required under the CoA or REMM in the preparation of this HMP.

Note: RAPs will be required to be consulted with if Aboriginal objects were identified during excavations, this is however unlikely.

2 LEGAL AND OTHER REQUIREMENTS

The HMP addresses applicable requirements within the following documents:

- *The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Conditions of Approval SSI-8256, determined 12 December 2018 and modified 22 October 2020;*
- *The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Environmental Impact Statement, September 2017;*
- *The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report, dated June 2018;*
- *The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Bankstown Station Modification Report May 2020;*
- *The Sydney Metro Sydenham to Bankstown Staging Report;*
- *The Sydney Metro Construction Environmental Management Framework v3.2.*

The Compliance Matrix in Section 2.2 provides a comprehensive list of compliance requirements, environmental documents and the contract documents.

Table 3 below details the legislation and planning instruments considered during development of this Plan.

Table 3: Legislation and Planning Instruments

Legislation	Description	Relevance to this HMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The approval conditions and obligations are incorporated into this HMP.
Environment Protection and Biodiversity Conservation (EPBC) Act 1999 (Cwth)	The main purpose of this Act is to provide for the protection of the environment especially those aspects that are of national environmental importance and to promote ecological sustainable development. Heritage places are listed on the National Heritage List (NHL) for their 'outstanding heritage value to the nation' and are owned by a variety of constituents, including government agencies, organisations or individuals. Only items owned or controlled by the Commonwealth that meet the threshold for national heritage listing under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) are listed on the Commonwealth Heritage List (CHL) and/or the World Heritage List (WHL) and afforded protection under the EPBC Act.	Not relevant as no NHL, CHL or WHL items
National Parks and Wildlife Act 1974	The relevance of this Act is firstly in respect to the protection and preservation of Aboriginal artefacts.	No Aboriginal sites or areas of archaeological potential have been identified within the Project site. An

Legislation	Description	Relevance to this HMP
	Discovery of material on site suspected as being of Aboriginal origin must be reported and protected pending assessment and direction by Sydney Metro.	Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974 is not required for works approved under Part 5.1 of the EP&A Act.
Heritage Act 1977	This Act provides for the preservation and conservation of heritage items such as building, works, relic, places of historic interest, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance. It is an offence under this Act to wilfully and knowingly damage or destroy items of heritage value. Do not demolish, damage, move or develop around any place, building, work, relic, moveable object, precinct, or land that is the subject of an interim heritage order or listing on the State Heritage Register or heritage listing in a Local Environmental Plan without an approval from the Heritage NSW or local council.	Heritage Items are identified on the Project site and addressed as part of the CoA. An approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977 is not required for works approved under Part 5.1 of the EP&A Act.
Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwth)	This Act provides for the preservation and protection from injury or desecration to areas and objects of particular significance to Aboriginals. Areas and objects can be protected by Ministerial Declaration and it is then an offence to contravene such a declaration.	No areas or objects within the Project have been identified as being subject to such a declaration and this Act is of little relevance to the Project.
Coroners Act 2009	This Act enables coroners to investigate certain kinds of deaths or suspected deaths in order to determine the identities of the deceased persons, the times and dates of their deaths and the manner and cause of their deaths.	This Act is relevant if Human Skeletal Remains are located within the Project area

A number of heritage reports were prepared during detailed design for the Sydenham to Bankstown Upgrade in order to address design related REMM. The findings and recommendations of these reports have been included in this HMP where relevant. It is noted in the compliance matrix where the design related REMM for the project have been fulfilled by these reports (refer to Appendix A).

- *Sydney Metro City and Southwest Movable Heritage Strategy, October 2020;*
- *Sydney Metro City and Southwest Adaptive Reuse Strategy, October 2020;*
- *Sydney Metro City and Southwest Heritage Salvage Strategy, October 2020;*

2.1 Guidelines

Additional guidelines and standards to the management of heritage include:

- Code of Practice for the archaeological investigation of Aboriginal objects in NSW, (OEH 2010);*
- Aboriginal cultural heritage consultation requirements for proponents 2010 (OEH 2010);*
- Due Diligence Code of practice for protection of Aboriginal objects in NSW (OEH 2010);*
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2010);*
- Assessing Heritage Significance (NSW Heritage Office 2001);*
- Levels of Heritage Significance (NSW Heritage Office 2008);*
- Assessing Significance for Historical Archaeological Sites and Relics (NSW Heritage Branch, Department of Planning 2009);*
- Investigating Heritage Significance (NSW Heritage Office 2001);*
- How to Prepare Archival Recording of Heritage Items (Heritage Branch 1998);*
- Photographic Recording of Heritage Items Using Film or Digital Capture (Heritage Branch 2006).*

2.2 Conditions of Approval

The CoA and REMM relevant to the development of this HMP are listed in Appendix A. In accordance with CoA C4, the relevant requirements of the CEMF have also been included. Appendix A also provides a cross reference to demonstrate where the CoA or REMM is addressed in this HMP or other management documents.

2.3 Roles and responsibilities

The roles and responsibilities of key personnel with respect to heritage management are as followed in Table 4. All personnel are responsible for ensuring that heritage items are protected.

Table 4: Roles and responsibilities

Roles	Responsibilities
Department of Planning, Industry and Environment	- Approval of the Heritage Management Plan - Monitor compliance with the Heritage Management Plan
Project Director (Project Leader)	- Ensure that sufficient resources are allocated for the implementation of this HMP - Ensure that the CEMP covers the management and mitigation measures presented in this HMP - Ensure that the outcomes of the visual checks/ compliance construction monitoring/ incident reporting are systematically evaluated as part of ongoing management of construction activities - Ensure audits of construction site records/ monitoring records/ incident reports are undertaken and findings are shared with relevant site personnel and corrective actions are implemented - Authorise all monitoring reports and any revisions to this HMP
Project Environmental Manager	- Oversee the overall implementation of this HMP - Site Inductions - Ensure all relevant personnel have access to and understand the most up-to-date copy of this HMP

Roles	Responsibilities
	• Ensure that any required actions arising from the detection of unexpected heritage items or if works are required outside of the approved development footprint are reported to the relevant personnel for further action and ensure that the actions are effectively implemented • Ensure all monitoring reporting requirements are met and maintained on site
Construction supervisors Subcontractors	• Understand and implement mitigation protocols as required in the HMP and any other required measures during construction • Undertake relevant training to implement the requirements of this HMP • All personnel are responsible for ensuring that heritage items are protected • All site personnel to undertake toolbox talks in relation to the reporting process for unexpected finds • Informing the Environmental Manager of any heritage issues as they arise
Independent Environment Representative	• Receive and respond to communications from the Secretary in relation to the environmental performance of the Project; • Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; • Consider and inform the Planning Secretary on matters specified in the terms of this approval; • Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; • Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: (i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); • Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval; • As may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent

Roles	Responsibilities
	environmental audits required under Condition A34 of this approval; • As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; • Assess the impacts of minor ancillary facilities as required by Condition A19 of this approval; • Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and • Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.
Primary Excavation Director	• The Primary Excavation Director must be suitably qualified and be someone who meets the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (September 2019) to oversee and advise on matters associated with historic archaeology and advise the DPHI and Heritage NSW • The Excavation Director must be present to oversee excavation and advise on archaeological issues • The Excavation Director has the authority to advise on the duration and extent of oversight required as informed by the provisions of the approved AARD and Excavation Methodology • Martinus will nominate an Excavation Director who is able to manage State significant archaeology under the NSW Heritage Council Excavation Directors Criteria • The Primary Excavation Director will be engaged by Martinus
Heritage Consultant	• The Heritage consultant will be responsible for providing advice and guidance to manage and minimise potential impacts to any built heritage values through a variety of means, prepare heritage impact assessment reports for built heritage and to undertake required archival recording of the heritage items in accordance with the approval and relevant documents • The Heritage Consultant will be engaged by Martinus
Forensic Anthropologist	• The Forensic Anthropologist will respond to find of potential human remains in accordance with the Sydney Metro Exhumation Management Plan • The Forensic Anthropologist will be engaged by Martinus if required

Roles	Responsibilities
Conservation Architect	• The Conservation Architect will provide advice and review work methodologies where direct impacts to significant fabric of heritage are proposed • The Conservation Architect will be engaged by Martinus

3 EXISTING ENVIRONMENT

3.1 Context

The existing environment and heritage context of the Project has been assessed in the following background reports prepared to support the EIS and SPIR prepared for the Sydney Metro Sydenham to Bankstown upgrade project:

Sydney Metro City and Southwest –Sydenham to Bankstown: Aboriginal Heritage Archaeological Assessment, prepared by Artefact Heritage (2017a);

Sydney Metro City and Southwest – Sydenham to Bankstown: Non-Aboriginal Heritage Impact Assessment, prepared by Artefact Heritage (2017b);

Additional reports, which have been prepared for the project and have been used to support this Plan also include:

Sydney Metro City and Southwest – Sydenham to Bankstown Historical Archaeological Assessment and Research Design (AARD), prepared by Artefact Heritage (2017c)

Sydney Metro City and Southwest – Sydenham to Bankstown: Aboriginal Cultural Heritage Assessment Report (ACHAR), prepared by Artefact Heritage (2017d)

Southwest Metro Errant and Hostile Vehicle Project Heritage Impact Memo for Site Investigations, March 2024.

These reports have been referenced to inform this Plan in regard to existing environment, heritage significance and archaeological potential.

3.2 Aboriginal Heritage

Artefact Heritage (2017a) undertook a heritage assessment of the Sydney Metro City and Southwest – Sydenham to Bankstown Project.

An ACHAR was also prepared in consultation with the RAPs (2017d). No previously registered Aboriginal sites were located within the Project area. Two areas of potential archaeological deposits (PAD) were identified during the site survey for the EIS study, near Belmore and Punchbowl stations (S2B PAD01 and S2B PAD02 respectively).

S2B PAD01 is located in a small park (Guide Park) near Belmore Station and is covered by dense grass and several trees. The analysis of aerial photography indicated that the area has remained an open space since at least 1943 and no major ground disturbance has occurred.

S2B PAD02 is an area of archaeological potential within Warren Reserve adjacent to Punchbowl Station. The analysis of aerial photography from 1943 and over the past 10 years indicated that there appears to have been little subsurface disturbance. Intact soils were observed in a cutting to the north of the station.

These PADs lie outside of the project area therefore operation of the project is not expected to result in impacts on Aboriginal heritage. There are no cumulative impacts on Aboriginal heritage predicted during construction or operation of the project.

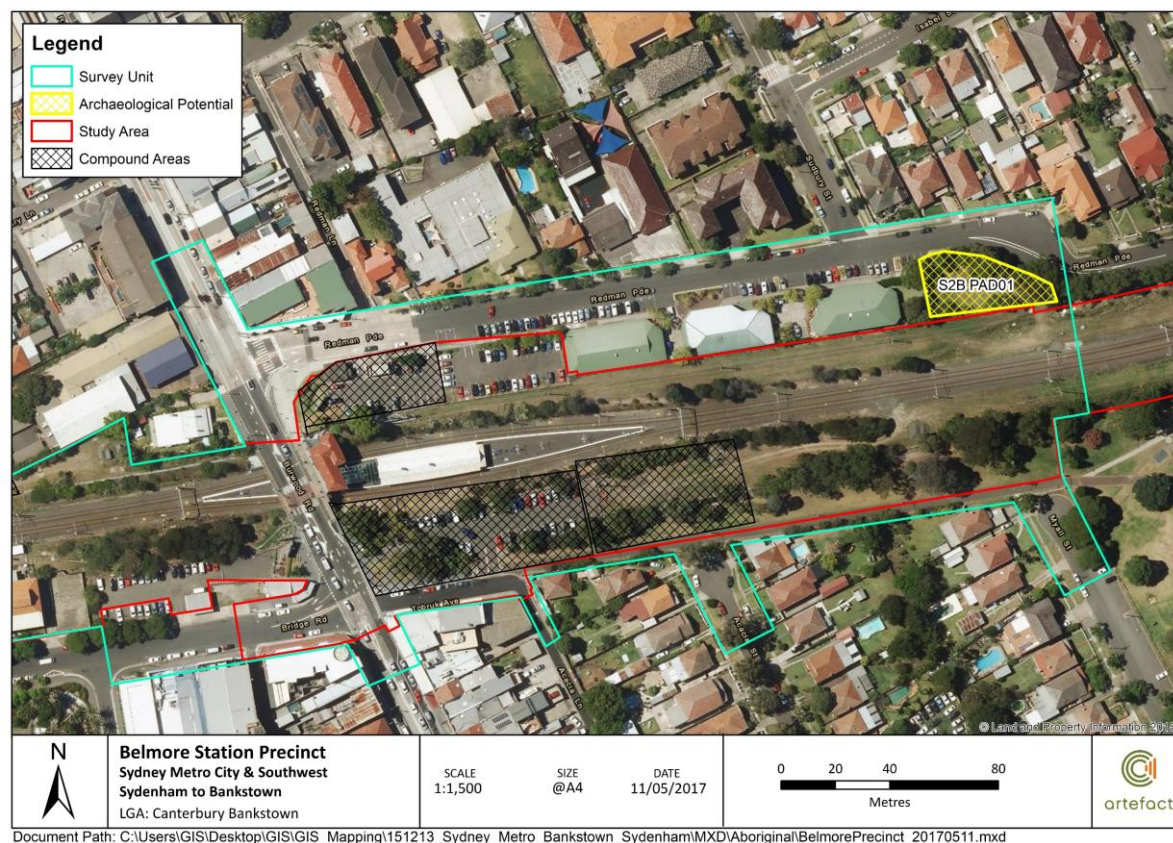


Figure 2 Location of S2B PAD01

3.3 Built Heritage

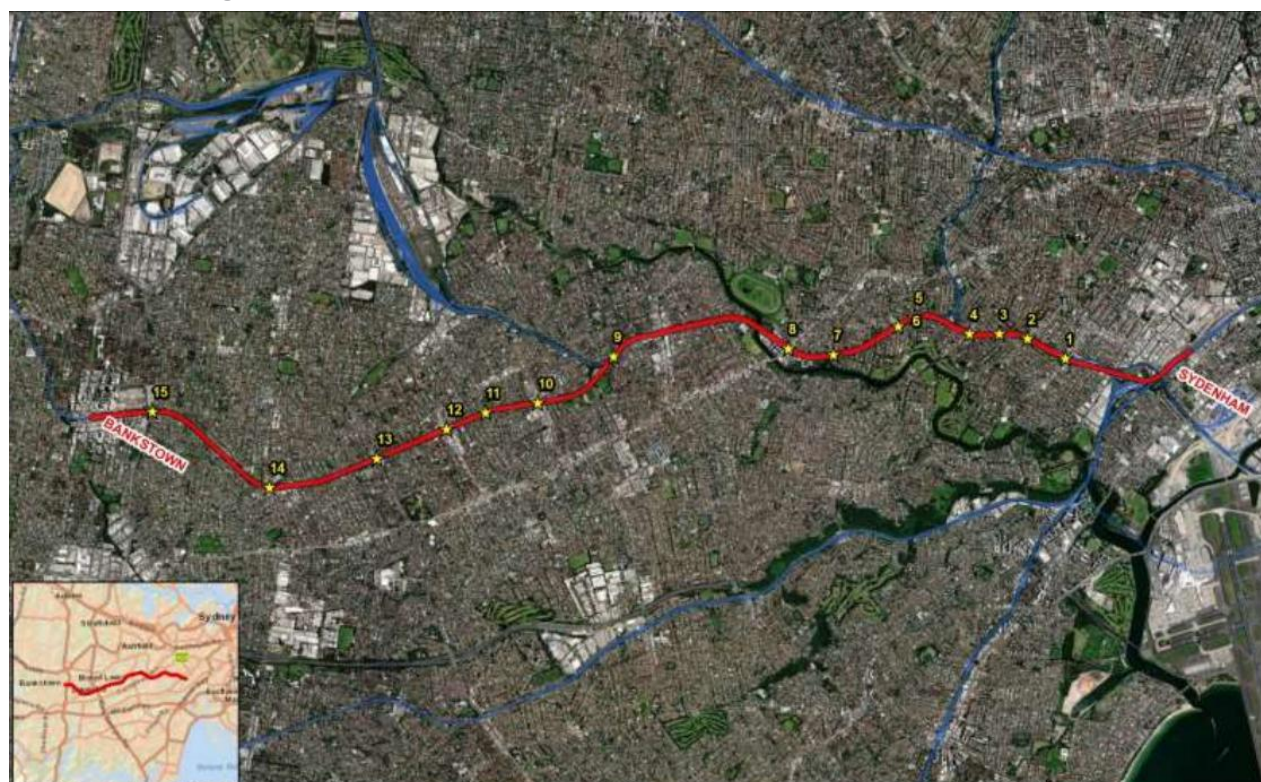
The Project works will include the installation of anti-throw screens and concrete bollards within the southwest corridor, including intersections of 15 overbridges. These 15 overbridges and their associated heritage status are shown in Table 5 below.

Table 5: Road/Rail Overbridges and Heritage Listings

Numbers as shown in Figure 1	Item	Listings	Significance
1	Illawarra Road Overbridge / Marrickville Station	NSW State Heritage Register, S170 Register	State
2	Livingston Road Overbridge / Marrickville	None	None
3	Albermarle Street Overbridge / Marrickville	LEP Conservation Area	Local
4	Wardell Road Overbridge / Dulwich Hill Station	S170 Register, LEP Heritage Conservation Area	Local
5	Garnet Street Overbridge / Marrickville	None	None

6	Duntroon Street Overbridge / Hurlstone Park Station	S170 Register, LEP Heritage Conservation Area	Local
7	Melford Street Overbridge / Hurlstone Park	None	Local
8	Canterbury Road Overbridge / Canterbury Station	S170 Register, LEP Heritage Conservation Area	State
9	Loch Street Overbridge / Campsie	None	None
10	Burwood Road Overbridge / Belmore Station	NSW State Heritage Register, S170 Register	State
11	Moreton Street Overbridge / Lakemba	None	None
12	Haldon Road Overbridge / Lakemba Station	S170 Register	Local
13	King Georges Road Overbridge / Wiley Park Station	S170 Register	Local
14	Punchbowl Road Overbridge / Punchbowl Station	S170 Register	Local
15	Stacey Street Overbridge / Bankstown	None	None

Figure 3: Metro development corridor with stars indicating the overbridges along the route (Source: Heritage Impact Memo 240053, Artefact 2024)



3.4 Non-Aboriginal Archaeology

A summary of archaeological potential and significance for the 15 overbridges is provided below.

Numbers as shown in Figure 1	Item / Area	Non-Aboriginal Archaeological Potential
1	Illawarra Road Overbridge / Marrickville Station	Moderate to high
2	Livingstone Road Overbridge / Marrickville	Nil
3	Albermarle Street Overbridge / Marrickville	Nil
4	Wardell Road Overbridge / Dulwich Hill Station	Nil to low
5	Garnet Street Overbridge / Marrickville	Nil
6	Duntroon Street Overbridge / Hurlstone Park Station	Nil to low
7	Melford Street Overbridge / Hurlstone Park	Nil
8	Canterbury Road Overbridge / Canterbury Station	Moderate to high
9	Loch Street Overbridge / Campsie	Nil
10	Burwood Road Overbridge / Belmore Station	Low to moderate
11	Moreton Street Overbridge / Lakemba	Nil
12	Haldon Road Overbridge / Lakemba Station	Low to moderate
13	King Georges Road Overbridge / Wiley Park Station	Nil to low
14	Punchbowl Road Overbridge / Punchbowl Station	Nil to low
15	Stacey Street Overbridge / Bankstown	Nil

4 CONSTRUCTION RISK ASSESSMENT

Impacts of the Project are described in Table 6, Table 7 and Table 8. Management measures to address these identified risks are included in Section 0.

Table 6: Aboriginal Heritage – Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
Subsurface excavations into natural ground surface. The risk is low as no areas within the Project were found to have Aboriginal archaeological potential.	Excavation	Finding/disturbance to and/or destruction of unexpected burials, human remains or Aboriginal objects.

Table 7: Built heritage – Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
Station precinct works and landscaping	Demolition of some elements and construction	Visual impacts, impacts to fabric
Installation of anti-throw screens and concrete bollards	Installation and construction of anti-throw screens and concrete bollards	Visual impacts, impacts to fabric
Use of existing site compounds and laydown areas	Installation and operation	Temporary visual impacts to listed items
Temporary works	Pedestrian control and access, installation of hoarding, fencing, utilities relocation and other temporary works	Temporary visual impacts to listed items

Table 8: Non-Aboriginal Archaeology– Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
Construction and use of compound sites and laydown areas	N/A	N/A – as no ground-breaking activities to occur within compound sites or laydown areas.
Station precinct works and landscaping	Excavation	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance

Activity	Aspect/s	Impact/s
Temporary works and utilities relocation	Excavation	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance

5 MANAGEMENT MEASURES

5.1 CEMP Aboriginal Archaeological Management

5.1.1 Aboriginal Cultural Heritage Assessment Report

An ACHAR was prepared by Artefact Heritage (2017d) as part of the Preferred Infrastructure Report (PIR) which forms part of the Approved Project as modified. Comprehensive Aboriginal consultation was undertaken as part of the preparation of the ACHAR, including an Aboriginal Focus Group (AFG) meeting. All RAPs who responded through consultation were in support of the proposed archaeological management methodology included in the ACHAR.

The ACHAR identified two areas of PAD that are outside the Project area, near Belmore and Punchbowl Stations. The ACHAR required that the rest of the Sydenham to Bankstown corridor will be managed under the Sydney Metro Unexpected Heritage Finds Procedure. The ACHAR will be implemented in accordance with REMM AH2 if unexpected Aboriginal objects were located within the project area.

5.1.2 Human Remains

If suspected human remains or burial sites are identified, the Sydney Metro Exhumation Management Plan will be implemented in accordance with CoA E15, E16 and E17 and REMM NAH19. In accordance with CoA E17, the Sydney Metro Exhumation Management Plan will be implemented for the duration of the Project's Construction's activities.

The Sydney Metro Exhumation Management Plan has been prepared to satisfy the requirements of CoA E15.

Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, Martinus, Forensic Anthropologist, Primary Excavation Director and Sydney Metro Environmental Representative. The Sydney Metro Exhumation Management Plan will be enacted. Preliminary notification to the NSW Police will be undertaken by the Sydney Metro Environmental Manager.

Once confirmation is received from the Forensic Anthropologist or Primary Excavation Director that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan.

No works to recommence until clearance is provided by Heritage NSW, and/or the NSW Police as per the documented in the Sydney Metro Exhumation Management Plan.

5.1.3 Unexpected Finds

hazardous to CoA E15 and REMM NAH18, Sydney Metro approach the Sydney Metro Unexpected Heritage Finds Procedure (SM- 18-00105232) (attached to Appendix D)APPENDIX D – Sydney Metro Unexpected Heritage Finds Procedure APPENDIX D – Sydney Metro Unexpected Heritage Finds Procedure APPENDIX D – Sydney Metro Unexpected Heritage Finds Procedure

. In accordance with CoA E17, the Sydney Metro Unexpected Heritage Finds Procedure will be implemented for the duration of the Project's Construction's activities.

In accordance with REMM NAH18, following the discovery of new finds of Aboriginal objects – works will cease in the immediate area and the area secured. Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Procedure. The use of the Sydney Metro Unexpected Finds Procedure will satisfy the requirement in E15, E16 and E17 to include measures to manage an unexpected find in the HMP.

An archaeological find will be unexpected if it was not identified in the AARD or the AMS as a class or type of possible remain, or if it was identified as locally significant but was assessed, after identification, as being of State significance.

All new sites will be recorded on standard Aboriginal Heritage Information Management System (AHIMS) site cards and lodged with Heritage NSW.

5.1.4 Clearance

A written clearance confirmation will be provided by the Project Archaeologist to Martinus once Aboriginal archaeological management has been completed in an area. This will be signed off by Sydney Metro before works recommence. Construction will continue under the Sydney Metro Unexpected Heritage Finds Procedure.

5.1.5 Reporting

Upon completion of any unexpected finds reporting and the implementation of any required mitigation measures, post excavation reporting in accordance with the Heritage NSW, DPC Aboriginal requirements will be undertaken within two years of the completion of the Project's archaeological works. The post-excavation report to be prepared by the Aboriginal Archaeologist in consultation with the RAPs. RAPs will review the draft report prior to finalisation.

5.2 Built Heritage Management

5.2.1 Design Requirements

As outlined in Section 2, a number of heritage reports have been prepared for the Southwest Metro Project and the relevant mitigations therein have been incorporated into this Plan. These measures have been considered in the plan where appropriate and have been included in the management action checklist (refer to

Table 9).

5.2.2 Conservation/Heritage Architect

Work methodologies undertaken where heritage items will be directly impacted will be carried out with the oversight of a conservation/heritage architect in accordance with REMM NAH20.

The architect will be available to advise Martinus during construction and work with the skilled tradespeople, Heritage Consultant and heritage engineer to facilitate good heritage outcomes.

5.2.3 Archival Photographic Recording

Archival photographic recording for the Sydenham to Bankstown upgrade has already been undertaken by Sydney Metro according to the methodologies of the following documents as specified in CoA E10 and E12 and REMM NAH13:

- NSW Heritage Council guideline “Photographic Recording of Heritage Items Using Film or Digital Capture” (2006); and
- NSW Heritage Office publication “How to Prepare Archival Records of Heritage Items” (1998).

As outlined in Section 2, archival recording requirements have been met during the Sydenham to Bankstown upgrade detailed design phase and are not applicable to this HMP.

5.2.4 Heritage Interpretation

In accordance with CoA E13, Sydney Metro prepared the Sydney City and Southwest: Sydenham to Bankstown Line Heritage Interpretation Strategy and issued this for information to DPHI on 3 June 2020. In accordance with CoA E14, individual Heritage Interpretation Plans have previously been prepared for each station precinct as part of the Sydney Metro Sydenham to Bankstown upgrade detailed design.

For the Southwest Metro Errant and Hostile Vehicle Project works, Artefact Heritage have prepared a Heritage Impact Memo report to provide desktop assessments and heritage advice relating to conducting site investigations for the design of the Project. This Heritage Impact Memo report draws from existing Southwest Metro SSI reporting for an assessment of significance for the heritage items.

5.2.5 Adaptive Reuse

As outlined in Section 2, an Adaptive Reuse Strategy has previously been prepared for the Sydney Metro Sydenham to Bankstown Upgrade and will be considered during the project’s detailed design.

5.2.6 Moveable Heritage

In accordance with REMM NAH7, Sydney Metro prepared the *City and Southwest Movable Heritage Strategy* after consultation with and seeking moveable heritage registers from Sydney Trains. No moveable heritage items listed in the Sydney Metro *City and Southwest Movable Heritage Strategy* will be impacted by the Project works.

5.2.7 Significant Fabric Register

As outlined in Section 2, a significant fabric register has been prepared and was considered during detailed design. A salvage register was prepared based on identification of significant fabric and a number of

elements have been required for salvage for the Project stations. This requirement has been met during the Sydenham to Bankstown upgrade detailed design phase and is not applicable to this HMP.

5.2.8 Works Methodologies

In accordance with REMM NAH15, where work activities are likely to impact upon built heritage (as outlined in Table 7) Martinus will ensure methodologies for the removal of existing structures and construction of new structures will be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works. The methodology will be prepared by Martinus and reviewed by the nominated Heritage Consultant where required and provided to Martinus and Sydney Metro.

In the case proposed impacts to heritage items are greater than the allowable limits of the Planning Approval SSI8256, evaluation must be completed by the nominated Heritage Consultant, with the information then shared with Sydney Metro for review, feedback and acceptance.

5.2.9 Heritage Engineer

A Heritage Engineer will be consulted in regard to any significant structural issues (where required).

The Heritage Engineer is to be consulted in regard to the relocation of utilities that undermine the Canterbury Signal Hut, which is listed under the Canterbury Station Group (SHR listed).

5.2.10 Skilled Tradespeople

In accordance with REMM NAH20, appropriately skilled tradespeople with experience working on heritage sites will be used for all works to conserve, protect or remove significant fabric. This includes works within the station buildings that involve the reuse, conservation or maintenance of significant fabric such as masonry, stonework, interiors and flooring. Martinus will notify Sydney Metro of the tradespeople nominated for the works. A heritage architect will be nominated for the Project in accordance with REMM NAH4, and this architect will be available to consult with the nominated tradesperson.

5.2.11 Exclusion Zones

Physical exclusion zones, including hoarding or screening will be provided where the Project works are to be undertaken in close proximity to significant elements/fabric that is not approved to be impacted. In accordance with NAH16 exclusion zones are to be applied to protect fabric during construction works carried out at:

- Marrickville Station
- Dulwich Hill Station
- South Dulwich Hill Conservation Area
- Canterbury Station
- Hurlstone Park Station
- Belmore Station
- Lakemba Station
- Wiley Park Station
- Punchbowl Station

Where works will be undertaken adjacent to a heritage item but not within the heritage curtilage, the exclusion zones will primarily be limited to identifying the nearby items on the respective environmental control map.

5.2.12 Works On Significant Fabric

HIAs were prepared by Artefact Heritage during the Sydenham to Bankstown Station Upgrade detailed design. The HIAs include detailed recommendations on management of significant fabric including station buildings, bridges, and platforms. These recommendations have been included in the management measures action checklist (refer to

Table 9) where applicable to the Project and will be adhered to during Construction.

5.2.13 Heritage Consultant Advice

Martinus has nominated a suitably qualified Heritage Consultant to advise on works during construction in regard to removal, reinstatement and conservation of significant fabric. The Heritage Consultant may be required to provide advice, to monitoring heritage works and to reporting on the outcome of works. The Heritage Consultant would work with the Conservation Architect and utilise their specialist skills were needed.

5.2.14 Landscape Plan

Planting along the eastern boundary of the Canterbury Bowls Club (adjacent to the Sugarmill site) should be reinstated if trees are impacted for the site compound in accordance with NAH11. Martinus will prepare and implement the Landscape and Visual Management Sub-plan as a safeguard in correct proactive and reactive management should Construction activities result in impacts to the existing trees on the eastern edge of the site.

5.3 Non-Aboriginal Archaeological Management

5.3.1 Archaeological Zoning

The AARD divided the Project into archaeological management zones based on archaeological potential and construction impacts.

Archaeological management zone mapping depicted at Marrickville and Belmore (Figure 4 and Figure 5) is based on a 'traffic light' coding:

- *Red (Zone 1): Direct impact to significant archaeology. Archaeological investigation required prior to any construction impacts (bulk excavation etc.).*
- *Amber (Zone 2): Potential impact to significant archaeology. Prepare Work Stage Specific Archaeological Method Statement (AMS) once construction methodology and impacts are known. Archaeological investigation is likely required; and*
- *Green (Zone 3): Unlikely to contain significant archaeology. Construction to proceed with Sydney Metro Unexpected Finds Procedure as nil-low potential for significant archaeological remains.*

Figure 4: Marrickville Station Catchment Archaeological Management Zones

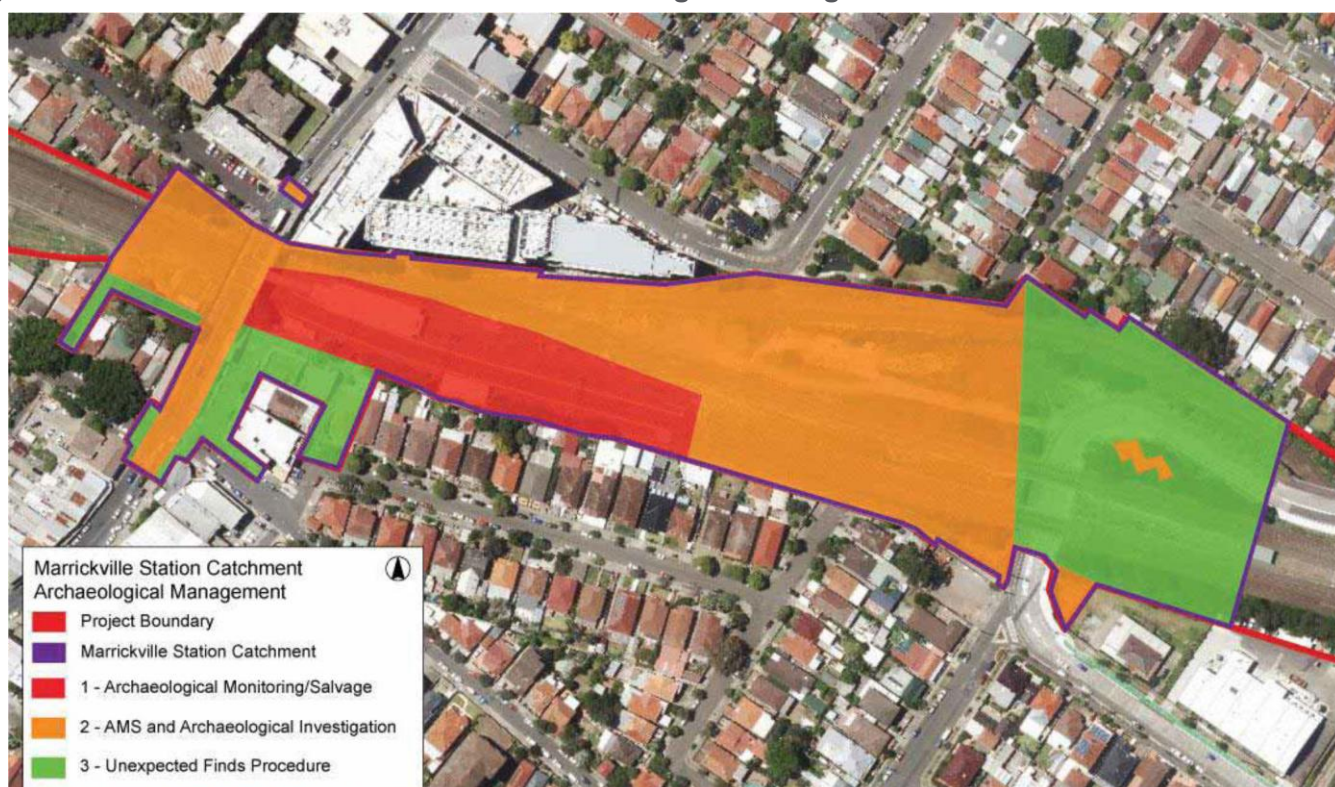


Figure 5: Belmore Station Catchment Archaeological Management Zones



5.3.2 Archaeological Management

Archaeological management will be undertaken in accordance with the works specific AMS documents and in accordance with the archaeological management zoning and AARD (refer to Figure 4 and Figure 5).

5.3.3 Archaeological Method Statement

An AMS will be prepared for the Project prior to sub-surface impacts within Red (Zone 1) and Amber (Zone 2) archaeological management zones as mapped in Figure 4 and Figure 5.

The AMS will include management for works within the defined areas of archaeological potential along the southwest corridor that will be impacted, as well as the procedure for managing unexpected archaeological finds. The AMS will include detail on archaeological potential and significance based on the AARD with additional information related to the subject site as required. It will include a methodology for archaeological management such as archaeological monitoring or test/salvage excavation in accordance with the AARD approved methodology. In accordance with REMM NAH12 the AMS will also include a methodology for analysis of heritage items, archaeological and artefact management strategies and a sieving strategy.

5.3.4 Excavation Directors

Before excavation of archaeological management sites, Martinus will nominate a suitably qualified Excavation Director (ED) who complies with the Heritage Council of NSW's *Criteria for Assessment of Excavation Directors* (September 2019) to oversee and advise on matters associated with historic archaeology and advise DPHI and Heritage NSW.

Roles and responsibilities are discussed in Table 4.

5.3.5 Unexpected Finds

In accordance with CoA E15 and E16 and REMM NAH 14 and NAH18, unexpected non-Aboriginal archaeological finds will be managed under the Sydney Metro Unexpected Heritage Finds Procedure (see Appendix D). In accordance with CoA E17, the Sydney Metro Unexpected Heritage Finds Procedure will be implemented for the duration of the Project's Construction's activities.

An archaeological find will be unexpected if it was not identified in the AARD or the AMS as a class or type of possible remain, or if it was identified as locally significant but was assessed, after identification, as being of State significance.

The Sydney Metro Unexpected Heritage Finds Procedure complies with Section 146 of the Heritage Act 1977, Notification of discovery of relic:

A person who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must: (a) within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic, notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and (b) within the period required by the Heritage Council, furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.

Notification under s146 of the Heritage Act 1977 will only be required if the relic was unexpected.

5.3.6 Clearance

A written clearance confirmation will be provided by the Primary Excavation Director to Martinus once archaeological management has been completed in an area. This will be signed off by Sydney Metro before works recommence. Construction will continue under the Sydney Metro Unexpected Finds Procedure (refer to Appendix D).

5.3.7 Human Remains

If suspected human remains are identified, the Sydney Metro Exhumation Management Plan will be implemented in accordance with CoA E15, E16 and E17 and REMM NAH19. It is not expected that human remains will be found as no potential burials were identified during research for the EIS and SPIR. In accordance with CoA E17, the Sydney Metro Exhumation Management Plan will be implemented for the duration of the Project's Construction's activities.

Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, Martinus, project archaeologist and Sydney Metro Environmental Representative. The Sydney Metro Exhumation Management Plan will be enacted. Preliminary notification to the NSW Police will be undertaken by the Sydney Metro Heritage Program Manager.

Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan.

No works to recommence until clearance is provided by Heritage NSW, DPC and/or the NSW Police as per the Sydney Metro Exhumation Management Plan.

5.3.8 Storage Of Archaeological Remains

Where possible artefact cleaning and preliminary cataloguing will occur on site, otherwise artefacts will be catalogued and stored off site at a location approved by Sydney Metro. Details on proposed sampling and analysis are provided in the AMS document in accordance with the AARD. The nominated Heritage Consultant would create the artefact catalogue under oversight of the Primary Excavation Director.

5.3.9 Analysis And Reporting

In accordance with CoA E11, the Historical Archaeological Excavation Report (as part of the Heritage Report) will be prepared for any heritage items of State significance that are discovered during the delivery of the Project. The Historical Archaeological Excavation Report will be prepared in accordance with the standard requirements of an Excavation permit issued by the Heritage Council, and include:

- *An executive summary of the archaeological programme;*
- *Due credit to the client paying for the excavation, on the title page;*
- *An accurate site location and site plan (with scale and north arrow);*
- *Historical research, references and bibliography;*
- *Detailed information on the excavation, including the aim, the context for the excavation, procedures, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale photographs and/or drawings, location of repository) and analysis of the information retrieved;*
- *Nominated repository for the items;*
- *Detailed response to research questions (at minimum those stated in the approved Research Design);*
- *Conclusions from the archaeological programme. The information must include a reassessment of the site's heritage significance, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the site and other comparable archaeological sites in the local area and any relevant recommendations for the future management of the site information and artefacts; and*
- *Details of how this information about this excavation has been publicly disseminated (for example provide details about Public Open Days and include copies of press releases, public brochures and/or information signs produced to explain the archaeological significance of the site).*

In accordance with CoA E11 and E12, the Historical Archaeological Excavation Report will be prepared in consultation with Heritage NSW following the completion of the Sydenham to Bankstown Upgrade project works and submitted to the Planning Secretary, Heritage NSW for information within two years of completion of the Sydenham to Bankstown Upgrade project works.

5.4 Heritage Awareness Training and Induction

All relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations and legislative requirements and cultural awareness training will be undertaken for all, including those involved with ground disturbing activities, which will include the following as relevant:

- *Information on the heritage significance;*
- *Information on the Aboriginal archaeological and cultural heritage values of the Project;*
- *The location and type of archaeological sites within the Project and give instructions not to disturb these sites;*
- *Clear information about statutory obligations for heritage in accordance with the NSW National Parks and Wildlife Act 1974 (NP&W Act). It is important to note that failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the NP&W Act (as amended);*
- *How to identify stone artefacts and other Aboriginal heritage sites; and*
- *Stop works and reporting protocols for discovery of previously unknown heritage and archaeological items.*
- *All relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations, legislative requirements and recommendations in the Non-Aboriginal Heritage Impact Assessment (Artefact Heritage 2012; 2015);*

All personnel involved with ground disturbing activities are made aware of their obligations to avoid any impacts to non-Aboriginal heritage under the Heritage Act 1977:

- *This will include information on historic heritage sites and 'relics' and information about statutory obligations under the NSW Heritage Act 1977;*
- *This will also include information on the potential for human skeletal remains and the requirements of the Sydney Metro Exhumation Management Procedure;*
- *Information relating to the nature of works and potential impacts via pre-starts at the start of activity; and*
- *Information about appropriate storage of materials, for example within designated laydown zones and only brought in when ready to install.*

All training and toolbox meetings will be recorded by Martinus. All project documentation, including environmental compliance and training records, will be kept as objective evidence of compliance with environmental requirements.

Further details regarding staff induction and training are outlined in Section 3.5 of the CEMP.

5.5 Ongoing Notifications – Unexpected Finds

The following protocol will be followed with respect to ongoing notifications.

- *For all unexpected heritage finds Martinus' Environmental Manager shall notify the Environmental Representative and Sydney Metro Senior Heritage Advisor in accordance with the Sydney Metro Unexpected Finds Procedure;*

- *Notification under s146 will only be required if the relic was unexpected and will apply to relics of State significance;*
- *For unexpected Aboriginal archaeological finds, RAPs will be notified immediately;*
- *Notification to the RAPs will occur within 1 week where changes to the Project are identified that may have implications for Aboriginal heritage management (such as changes in design);*
- *Feedback requested from the RAPs should be received within two weeks and no later than four weeks from the date correspondence is issued;*
- *The appropriate address and format for responses shall be provided as part of the request. Where no response is issued within this timeframe, a follow-up phone call will be made by Martinus' Environmental Manager (or project Heritage Specialist) to close out the outstanding request.*

All notification and consultation records will be kept by Martinus and their relevant consultants.

6 MANAGEMENT ACTION CHECKLIST

The management actions below are a quick reference to management required under the CoA, REMMS and recommendations of the HIAs prepared during detailed design.

Table 9: Management Action Checklist

Management Action	Timing	Responsibility	Description of Management	Location
General actions				
Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan.	Weekly during construction	Environmental Manager	Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoAs and this plan.	All stations
Daily inspections of controls will be undertaken by Supervisors during works.	Daily during construction	Site Supervisors	Complete daily inspections of the controls during works.	All stations
All relevant personnel and contractors involved in the design and construction of the Project must be advised of the relevant heritage considerations, legislative requirements and commitments.	Pre-construction	Environmental Manager Archaeologist	- Ensure all personnel involved in earthworks or any type of disturbance are appropriately trained / inducted and made aware of the cultural significance of the area, including site identification and materials likely to be uncovered. - Personnel will be instructed to notify the Environmental Manager in the event they identify any object which they believe to be of archaeological or cultural origin.	All stations
Where impacts are identified outside the Project area	During construction	Environmental Manager	- Non-compliance procedures outlined in the CEMP. - Where practicable avoid additional impacts, or confirm appropriate mitigation measures. - Ensure that Consistency Assessments are undertaken for any new impact areas and approval sought from Sydney Metro, as outlined in the CEMP. Further consultation with RAPs will be required where a Consistency Assessment identifies additional impacts to Aboriginal heritage. The Consistency Assessment will outline appropriate mitigation measures.	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Aboriginal stakeholder identification (RAP) and contact details in case of unexpected finds.	Pre-construction	Environmental Manager Archaeologist	- Identify RAPs (Appendix B). - Contact RAPs in accordance with the Sydney Metro Unexpected Finds Procedure in the case of unexpected finds of an Aboriginal object or potential Aboriginal human skeletal remains and/or Aboriginal burials - RAPs should be consulted prior to test or salvage excavation commencing in accordance with the project ACHAR and should be given the opportunity to participate in any excavation works in accordance with the ACHAR.	All stations
Nomination of an Excavation Director	Pre-construction	Environmental Manager	Before excavation of archaeological management sites, a qualified Excavation Director (ED) will be nominated who complies with the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (September 2019) in accordance with the AARD. DPHI and Heritage NSW shall be advised of the nominated ED.	All stations
Preparation of AMS	Pre-construction	Excavation Director	A works specific AMS will be prepared for this Project in accordance with the excavation methodology outlined in the AARD (NAH12). The AMS will be signed off by the Primary Excavation Director and will be prepared in consultation with the Environmental Representative. The AMS should note archaeological management required in the Canterbury Station compound site (Canterbury Bowls Club) where State significant archaeology may be present.	All stations
Archaeological management	Construction	Excavation Director	- Non-Aboriginal archaeological management is to be undertaken in accordance with the AARD and AMS. Zoning for the Project is shown in Figure 4 and Figure 5 - Archaeological management will be undertaken in those portions of identified archaeological management zones at Marrickville, Canterbury, and Lakemba Stations. Details of required management will be outlined in the AMS.	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Notification and management of relics	Construction	Excavation Director	- If any potential relics are located the ED will assess significance of the find and provide advice. - If relics are of local or State significance and are not identified in the AARD or AMS the Heritage NSW will be notified under s146 of the NSW Heritage Act.	All stations
Site clearance after archaeological management completed	Construction	Excavation Director	Site clearance will be required from the project archaeologist prior to construction commencing. This clearance will be in the form of a memo or email and will apply to a work specific area or the project sites as a whole, depending on stage of works.	All stations
Unexpected finds procedures for Aboriginal objects.	Construction	Archaeologist	- Following the discovery of previously unrecorded Aboriginal objects – works will cease in the immediate area and the area secured in accordance with the Sydney Metro Unexpected finds Procedure which in accordance with CoA E15, E16 and E17 and REMM AH5, NAH14 and NAH18. - Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Procedure and the ACHAR (REMM AH2). - In addition, the site will be recorded on standard AHIMS site cards and lodged with Heritage NSW - Upon completion of any unexpected finds reporting and required mitigation measures, post excavation reporting in accordance with the Heritage NSW Aboriginal heritage requirements will be undertaken within two years of the completion of the Project. Post-excavation report to be prepared by the Aboriginal archaeologist in consultation with the RAPs.	All stations
Unexpected finds procedures for human skeletal remains.	Construction	Archaeologist	Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, Martinus, project archaeologist and Sydney Metro Environmental Representative (CoA E17,	All stations

Management Action	Timing	Responsibility	Description of Management	Location
			REMM NAH14, AH5, and NAH19). The Sydney Metro Exhumation Management Plan (CoA E15) will be enacted. Preliminary notification to the NSW Police will be undertaken by the Sydney Metro Heritage Program Manager. - Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan. - No works to recommence until clearance is provided by Heritage NSW and/or the NSW Police as per the protocol outlined in the Sydney Metro Exhumation Management Plan.	
Conservation architect	During construction	Environmental Manager Conservation Architect	A heritage conservation architect will be consulted where impacts to heritage items are proposed in accordance with NAH20. This will generally be in relation to reviewing work methodologies and advising on managing and minimising impacts to significant fabric within the station buildings.	All stations
Heritage Engineer	During construction	Environmental Manager Heritage Engineer	Where significant impacts to fabric are proposed a heritage engineer will be consulted in regard to any structural issues, where required.	All stations
Skilled tradespeople	During construction	Environmental Manager	Appropriately skilled tradespeople will be used for works that will impact significant fabric. This includes works within the station buildings that involve the reuse, conservation or maintenance of significant fabric such as masonry, stonework, interiors and flooring. Martinus will notify Sydney Metro of the tradespeople nominated for the works.	All stations
Moveable Heritage	Pre-construction	Environmental Manager	- Identified movable heritage items to be impacted are listed in Section 5.2.6 - Where a movable heritage item is required to be removed in order to undertake the proposed works at a station, the	All stations

Management Action	Timing	Responsibility	Description of Management	Location
	During construction	Heritage Consultant	methods of relocation, storage and reinstatement outlined in the Movable Heritage Strategy should be followed.	
Identification of significant fabric	Pre-construction During construction	Environmental Manager Heritage Consultant	Significant fabric has been identified in the station specific Significant Fabric Registers. Where significant fabric is to be impacted appropriate management should be undertaken in accordance with the salvage strategy and the recommendations of the heritage impact assessments for design as outlined below. Specific fabric which will be impacted by Stage 3 design has been included in the Heritage Salvage Strategy	All stations
Salvage of significant fabric	Pre-construction During construction	Environmental Manager Heritage Consultant	- Salvaged elements identified in the Heritage Salvage Strategy should be carefully salvaged, transported and stored in a safe and weather-proofed location, in keeping with the requirements of this report. - Salvaged elements should be labelled to identify the origin of the element (i.e. station, building number, room designation), or where large volumes of material are salvaged (e.g. platform coping brick) these should be transported and stored in separately to avoid intermixing of materials from different locations. - Where significant fabric identified for salvage is found to be contaminated or effected by insects it should be disposed of in accordance with environmental control measures.	All stations
Storage of salvaged fabric	Pre-construction During construction	Environmental Manager Heritage Consultant	All salvaged materials to be re-used during construction for the Project will be stored on site and will be the responsibility of Martinus to ensure their condition and security during works. All salvaged items will be affixed with removable labels to identify their provenance and stored in a safe and weatherproof environment.	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Vibration monitoring	During construction	Environmental Manager	Vibration monitoring will be undertaken in accordance with the Project's Noise and Vibration Management Plan.	All stations
Removal of brick coping on the platforms	During construction	Heritage Consultant	That brick coping is removed along a single continuous horizontal line between brick coursework for the length of each platform, to ensure that a clean horizontal course of brick is preserved before the interface with new fabric above	All stations
Conduit installations in the platform	During construction	Environmental Manager Heritage Consultant	- That proposed conduits to be installed in the below-platform cavity are covered or painted in matte, recessive or neutral colours, to minimise their visibility. - The installation of a removable screening panel over the conduit cavity, also painted in matte, recessive or neutral colours, should be considered, in order to conceal services located within while still allowing access for maintenance - That conduits, cabling or new structures are not installed over or on to any lower remnants of original brick fabric	All stations
Platform ventilation shafts	During construction	Environmental Manager Heritage Consultant	Platform modification works should not impact, cover or remove any existing subfloor ventilation vents. Should platform grading be proposed which will cover over these vents, small spacings should be kept open.	All stations
Subfloor archaeology	During construction	Environmental Manager Excavation Director	Subfloor ground disturbance for these works should be managed under relevant provisions of the project Archaeological Research Design (AARD)	All stations
Subfloor ventilation	During construction	Environmental Manager Heritage Consultant	The installation of the suspended concrete slab on concrete piers should ensure that the subfloor cavity around the perimeter of each room is left open to ensure passive ventilation	All stations

Management Action	Timing	Responsibility	Description of Management	Location
			Subfloor ventilation grates should be protected to prevent inadvertent damage during floor replacement works	
Repair of significant fabric	During construction	Environmental Manager Heritage Consultant Conservation Architect	- Repainting works should follow relevant guidelines in Heritage Paint Schemes (RailCorp 2013). Protocols for repainting should match the existing colour scheme present at the station. - Brickwork which is modified should be repointed following the completion of works as necessary, to ensure a clean and consistent external appearance - Where the brickwork to the platform station buildings include a red stain to the mortar and tuck pointing. Ensure that the original condition is maintained and restored, as appropriate, where damage has occurred - New ceilings, lighting, flooring and proposed interior window coverings should be carefully detailed to avoid impacting significant fabric (such as door and window frames, panels, lintels and skirting boards and cornices). - Where works require the removal of existing intrusive fabric that adjoins original fabric (interior walls, services), the removal of the element should be conducted by hand to mitigate any potential heritage impact. - During renovation works, any damaged and deteriorating original fabric should be restored and refreshed. - Where a timber element is damaged, remove the entire thickness of the damaged area and geometrically splice in a matching section to the same thickness, shape, profile, form and species of the original timber. - Ensure that complementary coloured glass in colour and type is utilised in the top lights to the window sashes by replacing all non-coloured glass in the panes originally intended as coloured glass.	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Installation of services	During construction	Environmental Manager Heritage Consultant	- Existing penetrations into original fabric should be utilised where introduced fabric (new services and equipment) is to be located. Any existing penetrations that will not be utilised for new works should be repaired and made good. A suitably qualified heritage tradesperson should be engaged to complete these works - Above ground conduit installation should endeavour to use existing penetrations and entry points to structures. Conduits should not cover significant fabric or areas of detailing wherever possible. Conduits and conduit casings should not introduce large noticeable structures or items in areas of significant detailing or within significant view lines. During detailed design, conduit works should adhere to the principles and guidelines outlined in the <i>Heritage Technical Note, Installation of New Electrical and Data Services at Heritage Sites</i> (Sydney Trains, 2017) to prevent minor cumulative impacts to fabric from occurring due to ad hoc conduit design solutions. Conduit design solutions should avoid ad hoc solutions which can cause further physical and visual impacts to heritage significant fabric - New Combined Services Route (CSR) and Galvanised Steel Troughing (GST) will increase the visual clutter. Prior to the commencement of the Sydney Metro service operation, redundant Sydney Trains GST should be removed to minimise the impact of new services in the station area.	All stations

7 MONITORING, AUDITING AND REPORTING

7.1 Compliance

Martinus will regularly review the Project activities to ensure compliance with this Plan. A regular inspection program for heritage management will be conducted as follows:

- *Details of daily inspection undertaken by the Site Supervisor will be logged in their respective site diaries, and maintenance will be undertaken during active site works;*
- *Routine weekly inspections are to be conducted by the Environmental Manager to monitor heritage management and implementation of this HMP at active worksites. Weekly inspections will be documented to maintain compliance and effectiveness of controls;*
- *Items that require action will be documented on the site environmental inspection. Items that require specific and detailed action will be recorded on the Project's Corrective Action Register, maintained by Environmental Manager.*

Martinus' Construction Manager will be responsible for providing appropriate resources in terms of labour, plant and equipment to enable issues to be rectified in the nominated timeframes.

Records associated with this Plan will be maintained in accordance with Section 3.15 of the CEMP. Site inspections will be undertaken and records maintained within Martinus' Information Management System.

7.2 Archaeological Monitoring

Archaeological monitoring of works which may impact significant archaeological remains will be undertaken in accordance with the AMS. Monitoring will be overseen by the Excavation Director.

7.3 Archaeological Reporting

A preliminary results report will be prepared within two months of completion of archaeological work. This will be prepared under the direction of the Primary Excavation Director. An excavation report will be prepared within two years of completion of the Project's archaeological excavations in accordance with CoA E12.

8 REVIEW AND IMPROVEMENT

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies objectives and targets. Martinus will be responsible for carrying out these routine and ongoing evaluations.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance;
- Determine the cause or causes of non-conformances and deficiencies;
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies;
- Verify the effectiveness of the corrective and preventative actions;
- Document any changes in procedures resulting from process improvement; and
- Make comparisons with objectives.

This HMP will be reviewed on a six-monthly basis and earlier if required taking into account the following:

- The status and progress of The Project's activities;
- Changes in the design, delivery and operations processes and conditions;
- Lessons learnt during delivery and operations;
- Changes in other related Project Plans;
- Requirements and matters not covered by the existing Project Plans;
- Changes to Project Plans as directed by Sydney Metro's Representative under the Deed;
- Where deemed appropriate in relation to items raised within inspections or audits;
- Lessons learnt from incident, events or near misses;
- Feedback from Compliance Tracking Reports; and
- Feedback on Construction Monitoring Program results.

8.1 Enquiries, Complaints and Incident Management

Environmental incidents and non-compliances associated with heritage will be managed in accordance with Section 3.10 of the CEMP.

Enquiries and complaints that relate to heritage management will be managed in accordance with the Project's Overarching Community Communication Strategy and Section 3.7 of the CEMP.

9 HMP ADMINISTRATION

9.1 Hold Points

Heritage management hold points are included within Table 10.

Table 10: HMP hold points

Item	Process Held	Acceptance Criteria	Approval Authority
Encounter of Unexpected Heritage Item	Commencement of works in the affected area	The Unexpected Finds Process as outlined in the HMP and Sydney Metro Unexpected Finds Procedure must be applied in the event of encountering unexpected/potential heritage items.	Environmental Manager (or delegate)
Construction identified as affecting buildings	Site activities	Building Condition Survey conducted by an appropriate professional nominated by the Principal Contractor	Construction Manager

9.2 Records

Records associated with this management plan will be maintained in accordance with Section 3.15 of the CEMP. Records relating to heritage management will include (but are not limited to):

- Inspections undertaken in relation to heritage management measures;
- Archival recordings undertaken of any heritage item;
- Unexpected finds and stop work orders; and
- Records of any impacts avoided or minimised through construction methods
- Reporting of any incidents or non-compliances against heritage items.

APPENDICES

APPENDIX A – Other Conditions of Approval, Revised Environmental Mitigation Measures and CEMF Requirements Relevant to this Plan

Conditions of Approval relevant to the development of this Plan

CoA No.	Condition Requirement	Document Reference			
C3	The CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan and be consistent with the CEMF and CEMP referred to in Condition C1: <table border="1"> <tr> <td>(d)</td><td>Heritage</td><td>Heritage Council (or its delegate) and relevant council(s)</td></tr> </table>	(d)	Heritage	Heritage Council (or its delegate) and relevant council(s)	Section Error! Reference source not found. Appendix D
(d)	Heritage	Heritage Council (or its delegate) and relevant council(s)			
C4	The CEMP Sub-plans must be prepared in accordance with the CEMF	This Table			
C5	Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant CEMP Sub-Plan.	Section Error! Reference source not found. Appendix D			
C6	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction.	Refer to section 1.2 of the CEMP			
C7	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary.	Refer to section 1.2 of the CEMP			
E10	Following completion of Work described in the documents listed in Conditions A1 and A2 in relation to heritage items, a Heritage Report including the details of any archival recording, further historical research either undertaken or to be carried out and archaeological excavations (with artefact analysis and identification of a final repository for finds), must be prepared in accordance with any guidelines and standards required by the Heritage Council of NSW and OEH.	Section 5.2.3 Section 5.3.9			

CoA No.	Condition Requirement	Document Reference
E11	An Excavation Director's Report (EDR) must be prepared for any heritage items of State significance that are discovered during Work. The EDR must be prepared in consultation with OEH	Section 5.3.9 Table 9
E12	The Heritage Report and Excavation Directors Report must be submitted to the Planning Secretary, the Heritage Council of NSW and OEH for information no later than 24 months after the completion of Work referred to in Condition E10.	Section 5.3.9 Table 9
E13	The Proponent must prepare a Heritage Interpretation Strategy which outlines a process to interpret key Aboriginal and non-Aboriginal heritage values and stories of heritage items in the final project design. The Heritage Interpretation Strategy must be prepared in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information before the commencement of Construction.	Section 5.2.4
E14	A Heritage Interpretation Plan(s) must be prepared, consistent with the Heritage Interpretation Strategy which identifies heritage items to be used in the final design of the project. The plan(s) must identify how items will be interpreted and provide a timeframe for their implementation which must be no later than the commencement of Operation. Heritage interpretation in any station precinct must be identified in the relevant Station Design and Precinct Plan(s) required in Condition E56. The Heritage Interpretation Plan must be prepared in accordance with the NSW Heritage Manual, the NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005), and the NSW Heritage Council's Heritage Interpretation Policy.	Section 5.2.4
E15	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with the guidelines and standards prepared by the Heritage Council of NSW or OEH	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D) Sydney Metro Exhumation Management Plan

CoA No.	Condition Requirement	Document Reference
E16	The Unexpected Heritage Finds and Human Remains Procedure must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information no later than one (1) month before the commencement of Construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D) Sydney Metro Exhumation Management Plan
E17	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Construction and during Operational maintenance Work. Note: Human remains that are found unexpectedly during Work are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)

Revised Environmental Mitigation Measures relevant to the development of this Plan

REMM No.	REMM Requirement	Timing	Document Reference
Non-Aboriginal Heritage			
NAH1	The project design would minimise adverse impacts to heritage buildings, elements, fabric, spaces and vistas that contribute to the overall heritage significance of the Bankstown Line.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9

REMM No.	REMM Requirement	Timing	Document Reference
NAH2	The project design would maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9
NAH3	The project design would complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9
NAH4	The project design would be developed with guidance from an appropriately qualified and experienced conservation architect.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9
NAH5	Where heritage significant items or elements are to be retained within the operational area, an adaptive reuse strategy would be prepared by an appropriately qualified and experienced heritage architect.	Design/pre-construction	Section 5.2.5 Table 9
NAH6	A Heritage Interpretation Plan would be prepared to document the development of the Bankstown Line and detail the history of each station and its contribution to both the Bankstown Line and the surrounding suburbs. Appropriate heritage interpretation would be incorporated in the design and would provide legible connection between stations.	Design/pre-construction	Section 5.2.4 Table 9
NAH7	A moveable heritage item strategy would be prepared by an appropriately qualified and experienced heritage specialist in	Design/pre-construction	Section 5.2.6

REMM No.	REMM Requirement	Timing	Document Reference
	consultation with Sydney Trains, and would include a comprehensive record of significant railway elements to be impacted. This would include items contained within station and platform buildings as well as of any other significant equipment within the curtilage of the heritage railway stations. The moveable heritage item strategy would form part of the broader interpretation strategy.		Table 9
NAH8	Where significant buildings are to be re-purposed or refreshed: - the inherent character of the building should be retained with new additions, including form, palette and materiality, sympathetic to its heritage values - a suitably qualified and experienced heritage architect should advise on appropriate materials and finishes which would be sympathetic to the heritage values of each individual station - the internal layout of the building should be retained where possible, and rooms should not be subdivided unless it can be completed without adverse impact and/or is reversible without any long term adverse impact - a significant element register should be prepared by a suitably qualified and experienced heritage architect. The register should list significant fabric, assess its condition, tolerance for change and recommend retention or salvage - where fabric of high significance is to be removed, adequate assessment should be carried out that outlines impact and justification in accordance with the Statements of Heritage Impact guidelines (NSW Heritage Council 2002)	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 2.1 Section 5.2.1 Section 5.2.7 Table 9 A statement of heritage impact has been completed during design stage along with a significant elements register to satisfy this requirement.
NAH9	The design and materials used for the construction of new access stairs, concourses, canopies and lift shafts should be as sympathetic as possible to the existing character of the stations with the aim of minimising visual impacts. The design should use unobtrusive, modern, lightweight materials such as glass panelling and slim frame elements. The Design Review Panel should be consulted in regard to the design, form and material of these additions.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9

REMM No.	REMM Requirement	Timing	Document Reference
NAH10	Where platforms are re-levelled, door thresholds and steps should be accessible without raising or relocation of entries. Sub-floor ventilation should remain open to avoid long term impacts to the structures.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 9
NAH11	A landscape scheme would be prepared for the Old Sugarmill to re-instate planting within and close to the curtilage of the item. The scheme would consider appropriate period plants and trees. Any boundary wall treatment would be designed in consultation with a heritage architect.	Design/pre-construction	Section 5.2.14 Section 5.2.2
NAH12	The archaeological research design, including any mitigation measures identified in the Archaeological Assessment and Research Design report, would be implemented.	Design/pre-construction	Section 5.3.3
NAH13	Photographic archival recording would be carried out in accordance with the NSW Heritage Office's How to Prepare Archival Records of Heritage Items (1998), and Photographic Recording of Heritage Items Using Film or Digital Capture (2006).	Design/pre-construction	Section 5.2.3 Table 9
NAH14	An unexpected finds procedure would be developed and included in the construction heritage management plan.	Design/pre-construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH15	Methodologies for the removal of existing structures and construction of new structures would be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works.	Construction	Section 5.2.8 Table 9
NAH16	All retained heritage buildings, structures, fabric and moveable heritage items would be protected to avoid damage during works in the vicinity of these items, including from vibration. Retained significant buildings or	Construction	Section 5.2.11 Table 9

REMM No.	REMM Requirement	Timing	Document Reference
	elements susceptible to damage would be protected by hoardings or screens.		
NAH17	Prior to construction commencing, a detailed inventory of all buildings, structures, fabric, spaces and vistas of heritage significance that are to be retained or removed would be prepared by appropriately qualified and experienced heritage specialists. The inventory must provide an assessment of the heritage impact based on the significance of each element and sub- element that comprises it and include recommendations for protection and conservation relative to the identified level of heritage significance.	Construction	Section 2.1 Section 5.2.7
NAH18	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the unexpected finds procedure would be implemented.	Construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH19	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Transport for NSW Exhumation Management Plan would be implemented.	Construction	Section 5.1.2 Section 5.3.7 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH20	All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.	Construction	Section 5.2.10 Table 9
NAH21	A conservation management plan would be prepared for all State Heritage Register listed stations, in accordance with NSW Heritage Council guidelines. The plan would address any changes to the item, including updated assessment of significance of elements and recommendations on curtilage changes. It would also provide suggested site specific exemptions and management policies.	Design/pre-construction	Statement of heritage impact
NAH22	A conservation management strategy would be prepared for nominated Section 170 register listed stations not listed on the State Heritage Register, in accordance with NSW Heritage Council guidelines.	Pre-construction	Statement of heritage impact

REMM No.	REMM Requirement	Timing	Document Reference
NAH23	Prior to the removal of the Bankstown Parcels Office (former), a heritage salvage and moveable heritage register should be prepared, identifying those significant elements which can be removed and retained for potential reuse.	Pre-construction	The removal of Bankstown Parcels Office is not within this scope of this Project. This REMM is not relevant to this Plan.
Aboriginal Heritage			
AH1	Aboriginal stakeholder consultation would continue to be undertaken in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECC, 2010).	Pre-construction	Consultation with RAPs was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during preparation of the ACHAR RAPs would be involved if Aboriginal objects were identified during excavations. Section 1.4 Section 5.1.5 Section 5.5 Section 6 Table 9
AH2	The Aboriginal Cultural Heritage Assessment Report would be implemented.	Pre-construction	There are no identified areas of Aboriginal archaeological potential or Aboriginal sites within the Project area. The ACHAR would be implemented in the event of an unexpected find. Section 5.1.1
AH3	Archaeological test excavation (and salvage if required) would be carried out at S2B PAD02 at Punchbowl Station. Excavations would be conducted in accordance with the methodology outlined by the Aboriginal cultural heritage assessment report.	Pre-construction	S2B PAD02 is not within the Project area therefore this measure is not relevant to this current scope of works and Plan.
AH4	Appropriate Aboriginal heritage interpretation would be incorporated into the design in consultation with Aboriginal stakeholders.	Pre-construction	Section 5.2.4

REMM No.	REMM Requirement	Timing	Document Reference
AH5	If potential Aboriginal items are uncovered during the works, all works in the immediate area would cease, and the unexpected finds procedure included in the construction heritage management plan would be implemented. During pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the National Parks and Wildlife Act 1974.	Construction	Section 5.1.3 Sydney Metro Unexpected Finds Procedure (Appendix D)

Construction Environmental Management Framework requirements relevant to the development of this Plan

CEMF Section	CEMF Requirement	Document Reference
10.1(a)	The following heritage management objectives will apply to construction: • Embed significant heritage values through any architectural design, education or physical interpretation. • Minimise impacts on items or places of heritage value. • Avoid accidental impacts on heritage items. • Maximise worker's awareness of indigenous and non-indigenous heritage	Significant heritage values have been embedded in the heritage interpretation design development of the Project. Section Error! Reference source not found. Section 5.2.4 Section 5.2.11 Section 5.2.12 Section 5.3.2 Section 5.4
10.2(a)	Principal Contractors will develop and implement a Heritage Management Plan which will include as a minimum:	-
i.	Evidence of consultation with Registered Aboriginal Parties and the NSW Heritage Council	Section Error! Reference source not found. Appendix B Appendix E

CEMF Section	CEMF Requirement	Document Reference
ii.	Identify initiatives that will be implemented for the enhancement of heritage values and minimisation of heritage impacts, including procedures and processes that will be used to implement and document heritage management initiatives	Table 9
iii.	The heritage mitigation measures as detailed in the environmental approval documentation	Section 0 Table 9 Appendix A
iv.	The responsibilities of key project personnel with respect to the implementation of the plan	Section 2.3 Table 4
v.	Procedures for interpretation of heritage values uncovered through salvage or excavation during detailed design	Section 2 Section 5.2.4
vi.	Procedures for undertaking salvage or excavation of heritage relics or sites (where relevant), consistent with and any recordings of heritage relics prior to works commencing that would affect them	Section 5.3.2
vii.	Details for the short term and/or long term management of artefacts or movable heritage	Section 5.3.8
viii.	Details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity)	Section 0 Table 9
ix.	Procedures for unexpected heritage finds, including procedures for dealing with human remains	Section 5.1.3 Section 5.3.5 Appendix D
x.	Heritage monitoring requirements	Section 7
xi.	Compliance record generation and management	Section 7
10.2(b)	The Contractor's regular inspection will include checking of heritage mitigation measures	Section 7
10.2(c)	Compliance records will be retained by the Contractor. These will include:	-
i.	Inspections undertaken in relation to heritage management measures	Section 7
ii.	Archival recordings undertaken of any heritage item	Section 5.2.3

CEMF Section	CEMF Requirement	Document Reference
iii.	Unexpected finds and stop work orders	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
iv.	Records of any impacts avoided or minimised through design or construction methods	Section 7 Section 8
10.3(a)	Examples of heritage mitigation measures include:	-
i.	Any heritage item not affected by the works will be retained and protected throughout construction.	Section 5.2.11
ii.	During construction undertake professional archaeological investigation, excavation, and reporting of any historical Indigenous heritage sites of state significance which will be affected. Reporting may be completed as construction progresses	Section 5.1 Section 5.3
iii.	Undertake archival recordings of all non-Indigenous heritage items affected by the works prior to commencement of works	Section 5.2.3
iv.	Implement unexpected heritage find procedures for Indigenous and non-Indigenous heritage items.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
Table 17.4	- The design is sympathetic to the historic significance of existing stations, and where practicable, avoids and minimises impacts to heritage. - The preferred project retains, and where possible, repurposes all heritage elements. - The design and mitigation strategies are reviewed by the Sydney Metro Design Review Panel. - Impacts on heritage are managed in accordance with relevant legislation, including the EP&A Act, the Heritage Act 1977, and relevant guidelines. - Potential impacts are managed by the mitigation measures.	This Project works do not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 3 Table 9

APPENDIX B – Statement of Heritage Impact

Southwest Metro Errant and Hostile Vehicles Project

Statement of Heritage Impact

Report to Martinus and Sydney Metro

November 2024



 artefact

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Southwest Metro Errant and Hostile Vehicles Project

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EXECUTIVE SUMMARY

The Southwest Metro Project involves upgrading the 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13-kilometre-long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and west of Bankstown Station. The project was approved as a Critical State Significant Infrastructure project (CSSI 8256) under the *Environmental Planning & Assessment Act 1979* by the Minister for Planning on 12 December 2018, and the Minister's Conditions of Approval were granted. On 22 October 2020 a modification to the project (CSSI-8256-Mod-1) was approved for a revised station design for Bankstown Station.

As part of the project, Sydney Metro are planning to complete errant and hostile vehicle mitigation treatments at station bridges, non-station bridges and critical locations along the Southwest Metro corridor. The scope of this Errant and Hostile Vehicle Project includes the installation of anti-throw screens, concrete bollards, and rail barriers along the alignment, as well as other associated works where required.

Martinus, on behalf of Sydney Metro, have engaged Artefact Heritage and Environment to provide assessments and heritage advice relating to the planned works. This Statement of Heritage Impact has been prepared to identify the impacts that would result from the project and would inform the Construction Heritage Management Plan and be incorporated into the project Construction Environmental Management Plan.

Overview of findings

Planned errant and hostile vehicle treatment works would be undertaken at 15 bridge locations and 66 non-bridge locations along the SWM alignment. It has been identified that these works would be located within or near 27 heritage items or archaeological catchments that include a combination of local and State heritage items, including three items listed on the State Heritage Register. It has been identified that the planned works would cause physical and visual impacts to some of these heritage items.

The works at these locations would generally involve bridge safety treatments and the installation of off-bridge barriers. The bridge works would include the removal of existing safety barriers and screens, and the installation of new concrete and steel rail barriers, vertical safety screens, and associated modifications of bridge fabric. It has been identified that these works would cause impacts to significant fabric at some of the heritage items.

Overall, it has been assessed that the errant and hostile vehicle mitigation treatments would typically cause negligible to minor impacts to heritage items where bridge works are undertaken within heritage curtilages. Works to the Canterbury Road Bridge at Canterbury Station would have a moderate adverse impact to the bridge element as a result of the demolition of the existing brick parapet wall, but this would be partially mitigated by the salvage and reuse of the bricks for the fascia of the new barriers. For the remaining heritage items in the vicinity, it has been assessed that the proposed works would typically result in neutral physical impacts and neutral to negligible visual impacts. The material threshold would not be exceeded at any of the heritage items.

Of the relevant heritage items, six have been identified in the vicinity of the planned works that were not included in the *Sydney Metro City and Southwest – Sydenham to Bankstown Environmental Impact Statement and Submissions* and the *Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade Preferred Infrastructure Report*. However, it has been assessed that the impacts to most of these items would be neutral. Only 'Turpentine - Ironbark Forest Understory' (Inner West

Local Environmental Plan I1222) would be subject to negligible visual impacts, however, this is considered to be consistent with the existing level of impacts from the broader project.

It has been identified that works would be undertaken within the archaeological Marrickville, Canterbury, Belmore, and Lakemba Station Catchments. However, works would be limited to areas of Archaeological Management Zone (AMZ) 2 and AMZ 3 where little to no significant archaeological remains are expected to be present. The remaining work locations would be limited to the Bankstown Line Catchment (AMZ 3), which has been assessed as having nil to low potential. Overall, it is expected that there would be nil impacts to significant non-Aboriginal archaeological remains. There would be no harm to the area of Aboriginal archaeological potential, S2B PAD01.

Overall, it is assessed that the errant and hostile vehicle works are consistent with the existing project approvals and impact levels.

Recommendations and mitigation measures

The following recommendations are made to assist with the mitigation and management of heritage impacts associated with the works.

Built heritage

Prior to construction

- If changes to the scope of the works occur, further heritage assessment will be required to capture the additional impacts. In particular, this report will need to be updated when the Stage 3 design documentation is available
- The general requirements for the installation of new structures and required new services from the following documents should be considered:
 - *How to Carry out Work on Heritage Buildings & Sites* (NSW Heritage Office, 2002)
 - *Sydney Trains Heritage Technical Notes: Fixing Methods at Heritage Sites*
 - *Sydney Trains Heritage Technical Notes: Installation of New Electrical and Data Services at Heritage Sites* (Sydney Trains 2017)
- In the first instance, retain and conserve elements of high heritage significance where possible
- As part of the proposed works, condition inspections should be undertaken prior to, during and following completion of the work. Any repair works to heritage significant fabric should reinstate “like for like” and match the existing fabric. The repair works should be undertaken in consultation with the nominated Heritage Architect in accordance with REMM NAH 20, and Heritage NSW where appropriate, and should be documented
- A Photographic Archival Recording (PAR) of the areas impacted by the works is not recommended as these works have been captured in the PARs previously prepared for the project in accordance with REMM NAH 13
- Opportunities for the implementation of heritage interpretation at the stations in accordance with the Heritage Interpretation Strategies that have been prepared for the project should be considered as part of the detailed design process. This may include the installation of artwork on new barriers or bollards

- New services and equipment are to be rationalised and should not cover decorative fabric. Design for installation of services would be verified and/or revised in consultation with a Heritage Architect once final designs are available for review.

During construction

- All staff, including design professionals and tradespeople, involved in the works within or in the vicinity of heritage items that would be impacted, as assessed in this report, must receive a heritage induction and briefing prior to the commencement of works. The heritage induction should cover the heritage significance of the heritage items, identification of significant fabric and the recommendations and mitigation methods included in this report. This would apply to the following heritage items:
 - Marrickville Station
 - Dulwich Hill Station
 - South Dulwich Hill Conservation Area
 - Turpentine-Ironbark Forest Understorey
 - Canterbury Station
 - Hurlstone Park Station
 - Belmore Station
 - Lakemba Station
 - Wiley Park Station
 - Punchbowl Station
- All works to, and in the vicinity of significant heritage fabric must be coordinated with the heritage architect in accordance with REMM NAH20, to ensure they are conducted in accordance with relevant heritage controls in this SoHI and other heritage related documents
- Works on Albermarle Street Bridge must take care to avoid impacts to the Depression era brick paving. If temporary laydown areas or access paths are required near to, or over the brick paving, then impact protection measures must be implemented to protect the paving, such as coverings or ramps.
- If Depression era bricks need to be removed temporarily, the minimum number of bricks should be removed and then reinstated in the same herringbone pattern as existing, without grout or mortar. If mortar or grout is required for the relaying of the pavers, the materials should match existing and no cementitious materials are to be used
- When removing the original brick parapet walls at the Canterbury Road Bridge:
 - Masonry deconstruction and reconstruction should be conducted by tradespeople with demonstrated experience in managing and repairing heritage masonry, under the advice and supervision of the contractor's heritage architect
 - Salvage of brickwork should be conducted by hand as much as possible, with the least number of vertical saw cuts provided. Saw cuts should be conducted between brick courses and not through brick courses wherever possible

- Salvaged brickwork should be managed with care following removal to ensure inadvertent damage does not occur to bricks during transport and storage
- Salvaged bricks are to be stored by the contractor in a secure dry location nominated by Sydney Metro
- As not all bricks are expected to be salvaged intact, new replacement brick would be required. Replacement bricks must be appropriately matched in colour, dimensions, texture, type of aggregate and the range of colour and aggregate variation to existing brick
- Brick matching should be conducted with on-site comparison of existing and replacement bricks, with a moderate sample size of replacement brick, to ensure that matching qualities are met
- Bricks should be re-laid in the original pattern and bond as the existing parapet and retaining walls where possible, including existing angled sills and soffit courses
- New brick and original brick should be installed in consolidated sections and not intermixed, so that new and original fabric can be discerned.
- Additional time should be allotted during the construction program for the reconstruction works if hand deconstruction and reconstruction is not tenable during existing possession period estimates
- The bricks removed from demolished parapet walls at non-heritage listed bridges (Duntroon Street and Livingston Road bridges) are not required to be salvaged or reused. These bricks are not of heritage significance, and as they are painted, their compatibility with other bricks salvaged for reuse at heritage sites cannot be determined
- Where compressive filler material is planned be used between new concrete paths and existing brick masonry of parapet walls, the new material should be carefully installed so as to retain the integrity of the fabric it adjoins.
- When undertaking works in close proximity to significant fabric, impact or splash protection should be used where necessary to ensure that the surrounding fabric is not impacted. This may include the use of sound/construction blankets, geofabric, or other protective materials
- All works must be conducted in accordance with the relevant provisions of the Construction Heritage Management Plan and in the Construction Environmental Management Plan for the project
- Known items of heritage significance are to be labelled on Environmental Control Maps
- The following mitigation measures need to be undertaken during construction to protect heritage significant fabric in accordance with the *TfNSW Temporary works and protection at heritage sites during construction fact sheet*:¹
 - Avoid accidental damage to significant fabric with thorough planning, site-specific inductions and physical protection measures
 - No construction materials are to be stockpiled or stored against heritage items or trees. Clear delineation must be provided

¹ Transport for NSW, 2023. *The Temporary works and protection at heritage sites during construction fact sheet* EMF-HE-FS-0166.

- Vibration monitoring is to be undertaken in accordance with the required standards for works in the vicinity of heritage elements
- The following mitigation measures need to be undertaken during construction of the new fence (CI 109) within and adjoining the Turpentine-Ironbark Forest Understorey to prevent impacts to sensitive vegetation:
 - The Turpentine-Ironbark Forest Understorey is to be labelled on Environmental Control Maps
 - Ensure that the works do not impact any significant vegetation (including trees and grasses) thorough planning, site-specific inductions and physical protection measures
 - Implement any additional environmental controls necessary to protect the endangered ecological community and in accordance with best practice guidelines²
 - Maintain any existing Sydney Trains grass 'no-mow' zones in the vicinity of the works.
- Existing penetrations into original fabric should be utilised where introduced fabric (new services and equipment) is to be located. Any existing penetrations that would not be utilised for new works should be repaired and made good
- Above ground service installation should endeavour to use existing penetrations and entry points to structures. Services should not cover significant fabric or areas of detailing wherever possible. Services should not introduce large noticeable structures or items in areas of significant detailing or within significant view lines. During detailed design, services should adhere to the principles and guidelines outlined in the *Heritage Technical Note, Installation of New Electrical and Data Services at Heritage Sites* (Sydney Trains, 2017) to prevent minor cumulative impacts to fabric from occurring due to ad hoc service design solutions. Service design solutions should avoid ad hoc solutions which can cause further physical and visual impacts to heritage significant fabric
- Undertake all demolition work, removal of modern accretions and the like carefully and by hand to avoid damage to surrounding heritage fabric
- Existing penetrations are to be used where possible when introducing new services and equipment to limit change to heritage fabric
- Following removal of any modern elements, redundant penetrations, accretions and the like, repair and make good fabric as required and in accordance with best practice conservation techniques in consultation with specialist tradespeople and the heritage architect
- Where necessary clean all heritage fabric of dirt, organic growth, guano and other debris using low pressure warm water, biocide and a stiff bristle (non-ferrous) brush. Do not use aggressive or harsh chemicals, sand blasting or other abrasive means
- Allow for making good all existing surfaces exposed after removal of existing fixtures and fittings
- Unexpected or undocumented dilapidation of fixtures or materials discovered during the works should be brought to the attention of the nominated heritage consultant and heritage architect.

² Department of Environment & Climate Change NSW, 2008. *Best practice guidelines: Sydney Turpentine-Ironbark Forest*. Accessed online at: <https://www.environment.nsw.gov.au/resources/threatenedspecies/08528tsdssydturpironforestbpg.pdf>.

Archaeology

- It is recommended that excavations for the works be managed under the *Sydney Metro Unexpected Heritage Finds Procedure* and *Exhumation Management Procedure* in accordance with the management strategies for AMZ 3 as outlined in the Archaeological Assessment & Research Design and in the Aboriginal Cultural Heritage Assessment Report
- Works would be undertaken within AMZ 2 at Marrickville Station, Belmore Station, and Lakemba Station. However, as the excavations would be minor in nature and limited to areas not expected to contain significant archaeology, it is considered that archaeological monitoring would not be necessary. It is recommended that management of these excavations under AMZ 3 would be sufficient as outlined in the appended Archaeological Method Statement
- The location of the historical station archaeological catchments and the area of Aboriginal archaeological potential, S2B PAD01, must be shown on Environmental Control Maps
- The boundaries of S2B PAD01 must be marked out before undertaking works for CI-085 to ensure that excavations do not enter the mapped area of the PAD.

CONTENTS

1.0	Introduction.....	1
1.1	Project background.....	1
1.2	Study area	1
1.3	Assessment methodology	3
1.4	Limitations.....	4
1.5	Authorship.....	4
2.0	Heritage Items	5
2.1	Overview.....	5
2.2	Identification of heritage listed items	5
2.3	Summary of heritage listings	5
2.4	Heritage curtilages.....	8
3.0	Archaeological Assessment	18
3.1	Introduction	18
3.2	Marrickville Station Catchment.....	18
3.2.1	Potential archaeological remains at Marrickville Station	18
3.2.2	Archaeological management strategy for works at Marrickville Station	19
3.3	Canterbury Station Catchment	23
3.3.1	Potential archaeological remains at Canterbury Station	23
3.3.2	Archaeological management strategy for works at Canterbury Station	24
3.4	Belmore Station Catchment.....	29
3.4.1	Potential archaeological remains at Belmore Station.....	29
3.4.2	Archaeological management strategy for works at Belmore Station.....	30
3.5	Lakemba Station Catchment	33
3.5.1	Potential archaeological remains at Lakemba Station	33
3.5.2	Archaeological management strategy for works at Lakemba Station	33
3.6	Aboriginal archaeological potential.....	37
4.0	Proposed Works	38
4.1	Introduction	38
4.2	Bridge locations	38
4.3	Non-bridge locations.....	38
4.4	Project justification.....	39
4.5	Summary of work locations	39
5.0	Heritage Impact Assessment	46
5.1	Introduction	46
5.2	Heritage impact assessment	46
5.2.1	Heritage items involving bridge works.....	46

5.2.2	Remaining works near heritage items	74
5.3	Statement of heritage impact.....	78
5.4	Consistency assessment.....	80
6.0	Conclusion	82
6.1	Conclusion	82
6.2	Recommendations and mitigation measures	82
6.2.1	Built heritage.....	83
6.2.2	Archaeology.....	86
7.0	References	87

FIGURES

Figure 1: Project alignment.....	2
Figure 2: Heritage items near Illawarra Road Bridge	8
Figure 3: Heritage Items near Livingstone Road Bridge	8
Figure 4: Heritage items near Albermarle Street Bridge	9
Figure 5: Heritage items near Wardell Road Bridge	9
Figure 6: Heritage items near Wardell Road Bridge	10
Figure 7: Heritage items near Ewart Street.....	10
Figure 8: Heritage items near Garnet Street	11
Figure 9: Heritage items near Duntroon Street	11
Figure 10: Heritage items near Melford Street	12
Figure 11: Heritage items near Canterbury Road	12
Figure 12: Heritage items near South Parade.....	13
Figure 13: Heritage items near South Parade.....	13
Figure 14: Heritage items Lilian Lane.....	14
Figure 15: Heritage items near Redman Parade	14
Figure 16: Heritage items near Burwood Road	15
Figure 17: Heritage items near Haldon Street.....	15
Figure 18: Heritage items near King Georges Road	16
Figure 19: Heritage items near Dudley Street.....	16
Figure 20: Heritage items near Punchbowl Road	17
Figure 21: Archaeological potential for Marrickville Station Catchment	21
Figure 22: Marrickville Station Catchment archaeological management zones	22
Figure 23: Location of the former historical structures within the Canterbury Station Catchment, including the Canterbury Construction Site	26
Figure 24: Archaeological potential for Canterbury Station Catchment	27
Figure 25: Canterbury Station Catchment archaeological management zones.....	28
Figure 26: Archaeological potential for Belmore Station Catchment	31
Figure 27: Belmore Station Catchment archaeological management zones	32
Figure 28: Archaeological potential for Lakemba Station Catchment	35
Figure 29: Lakemba Station Catchment archaeological management zones.....	36
Figure 30: Location of S2B PAD01	37
Figure 31: East and west package areas for non-bridge locations (Source: Aurecon, <i>DP941 Non-bridge areas – East Design Report</i> , p. 11)	39
Figure 32: Illawarra Road Bridge (Source: Google maps)	47

Figure 33: Plan of treatment works for Illawarra Street Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	48
Figure 34: Albermarle Street Overbridge, with Depression era brick paving visible on the right (east) side (Source: Google Maps)	50
Figure 35: Plan of treatment works for Albermarle Street Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	51
Figure 36: Wardell Road Overbridge (Source: Google maps)	52
Figure 37: Plan of treatment works for Wardell Road Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	53
Figure 38: Duntroon Street Bridge (Source: Google Maps)	55
Figure 39: Plan of treatment works for Duntroon Street Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	56
Figure 40: Canterbury Road Bridge (Source: Google maps)	57
Figure 41: Plans of treatment works for Canterbury Road Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)	60
Figure 42: Burwood Road Bridge (Source: Google maps)	61
Figure 43: Plans of treatment works for Burwood Road Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	63
Figure 44: Haldon Street Bridge (Source: Google maps)	65
Figure 45: Plan of treatment works for Haldon Street Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)	66
Figure 46: Punchbowl Road Bridge (Source: Google Maps)	68
Figure 47: Plan of treatment works for Punchbowl Road Bridge (Source: Aurecon 2024, provided by ARCH Artifex)	69
Figure 48: King Georges Road Bridge (Source: Google Maps)	71
Figure 49: Plans of treatment works for King Georges Road Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)	72

TABLES

Table 1: Results of register searches for the study area.....	6
Table 2: Summary of areas with potential for significant archaeological remains for Marrickville Station	18
Table 3: Summary of archaeological management requirements at Marrickville Station Catchment..	19
Table 4: Summary of areas with potential for significant archaeological remains for Canterbury Station	23
Table 5: Summary of archaeological management requirements at Canterbury Station Catchment..	24
Table 6: Summary of areas with potential for significant archaeological remains for Belmore Station	29
Table 7: Summary of archaeological management requirements at Belmore Station Catchment	30
Table 8: Summary of areas with potential for significant archaeological remains for Lakemba Station	33
Table 9: Summary of archaeological management requirements at Lakemba Station Catchment	34
Table 10: Summary of work locations and heritage constraints.....	40
Table 11: Assessment of impacts to heritage items near work locations	74
Table 12: Statement of heritage impact for the errant and hostile vehicles treatment work	78
Table 13: Errant and Hostile Vehicles Project heritage impacts consistency with approved impacts as identified in SPIR	81

1.0 INTRODUCTION

1.1 Project background

The Southwest Metro Project (SWM) involves upgrading the 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13-kilometre-long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and west of Bankstown Station. The project will improve accessibility for customers and meet the standards required for metro operations. The project will enable Sydney Metro to operate beyond Sydenham, to Bankstown. The project was approved as a Critical State Significant Infrastructure project (CSSI 8256) under the *Environmental Planning & Assessment Act 1979* by the Minister for Planning on 12 December 2018, and the Minister's Conditions of Approval (CoA) were granted. On 22 October 2020 a modification to the project (CSSI-8256-Mod-1) was approved for a revised station design for Bankstown Station.

As part of SWM, Sydney Metro are planning to complete errant and hostile vehicle mitigation treatments at station bridges, non-station bridges and critical locations along the Southwest Metro corridor. The scope of this Errant and Hostile Vehicle Project includes the installation of anti-throw screens, concrete bollards, and rail barriers along the alignment, as well as other associated works where required.

Martinus, on behalf of Sydney Metro, have engaged Artefact Heritage and Environment (Artefact) to provide assessments and heritage advice relating to the planned works required for the Southwest Metro Errant and Hostile Vehicle Project. This Statement of Heritage Impact (SoHI) has been prepared to identify the impacts that would result from the project and would inform the Construction Heritage Management Plan (CHMP) and be incorporated into the project Construction Environmental Management Plan (CEMP).

1.2 Study area

The planned works would be undertaken along the SWM alignment between Sydenham Station and Bankstown Station (not inclusive) (Figure 1). The works would be located within the intersections of 15 bridges along the alignment, as well as 66 individual locations along the corridor where safety improvements are required. These works are located within the Local Government Areas (LGAs) of Inner West Council and Canterbury-Bankstown Council.

For the purpose of this assessment, the study area boundary has been defined as a 25-metre buffer around the SWM project area. The project area and the buffer are collectively referred to as the study area in this report unless otherwise stated. This approach has been taken to maintain consistency with the assessment methodology for the original Sydney Metro City and Southwest – Sydenham to Bankstown Environmental Impact Statement (EIS) and Submissions and the Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade Preferred Infrastructure Report (SPIR).

The location of the planned works that are in the vicinity of listed heritage items are illustrated in 2.4.

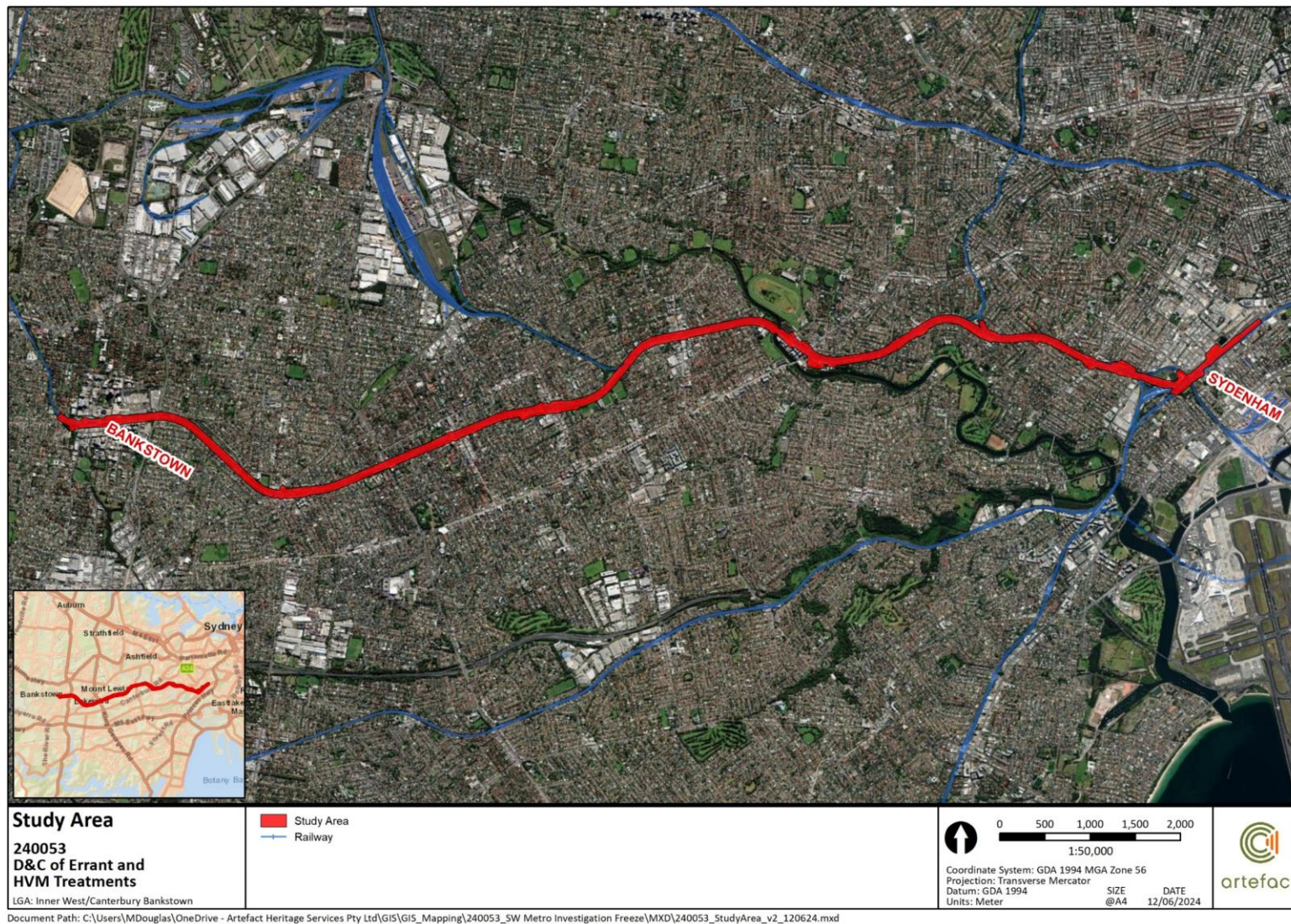


Figure 1: Project alignment

1.3 Assessment methodology

This report has been informed by, and has been prepared in accordance with, relevant heritage guidelines and standards including:

- Assessing heritage significance Guidelines for assessing places and objects against the Heritage Council of NSW criteria (Department of Planning and Environment, 2023)
- Guidelines for preparing a statement of heritage impact (Department of Planning and Environment, 2023)
- Material Threshold Policy (Department of Planning and Environment, 2022)
- Investigating Heritage Significance Guidelines (NSW Government, 2021)
- Levels of Heritage Significance (NSW Heritage Office, 2008)
- The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance Australia (ICOMOS 2013).

This report has been informed by and has taken into consideration the existing project assessments and approvals, including:

- Sydney Metro City & Southwest – Sydenham to Bankstown: Technical Paper No 3: Non-Aboriginal Heritage Impact Assessment³
- Sydney Metro City & Southwest – Sydenham to Bankstown: Technical Paper No 4: Aboriginal Heritage Impact Assessment⁴
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Submissions and Preferred Infrastructure Report Non-Aboriginal Heritage Assessment⁵
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Archaeological Assessment & Research Design (AARD)⁶
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Aboriginal Cultural Heritage Assessment Report (ACHAR)⁷
- CoA and Revised Environmental Management Measures (REMMs) for CSSI 8256 and CSSI-8256-Mod-1
- Individual station Detailed Design Heritage Impact Assessments prepared for SWM.

³ Artefact Heritage, 2017. *Sydney Metro City & Southwest – Sydenham to Bankstown: Technical Paper No 3: Non-Aboriginal Heritage Impact Assessment*. Report to Transport for NSW

⁴ Artefact Heritage, 2017. *Sydney Metro City & Southwest – Sydenham to Bankstown: Technical Paper No 4: Aboriginal Heritage Impact Assessment*. Report to Transport for NSW

⁵ Artefact Heritage, 2018a. *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Submissions and Preferred Infrastructure Report Non-Aboriginal Heritage Assessment*. Report to Transport for NSW.

⁶ Artefact Heritage, 2018b. *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Historical Archaeological Assessment & Research Design*. Report to Transport for NSW.

⁷ Artefact Heritage, 2018c. *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade: Aboriginal Cultural Heritage Assessment Report*. Report to Transport for NSW.

1.4 Limitations

This SoHI is primarily based on the historical and archaeological research provided in the existing heritage reports for SWM. Detailed background information from these documents has not been replicated in this report. Summaries of the findings of the existing reports are provided where necessary in this report.

This report is based on the Stage 1 and Stage 2 designs for the Errant and Hostile Vehicle Project that are available at the time of the preparation of this report. It is anticipated that there will be design refinements and changes made for the Stage 3 detailed designs. This report acknowledges the Errant and Hostile Vehicle Project SoHIs (2024) that have been prepared by Purcell for Aurecon for the railway station overbridges. This SoHI has been prepared separately to the SOHIs prepared by Purcell, and as a result it is expected that there may be minor differences in the assessment outcomes.

1.5 Authorship

This report has been prepared by Sabrina Roesner (Senior Heritage Consultant), Jennifer Castaldi (Senior Associate), and Jayden van Beek (Technical Specialist), with input and review provided by Scott MacArthur (Principal), all from Artefact Heritage.

2.0 HERITAGE ITEMS

2.1 Overview

This section identifies the heritage items that are located within or in close proximity (within 25m) of the planned works. Detailed summaries of these items were provided in the previous assessments and are not replicated in this section.

2.2 Identification of heritage listed items

Heritage listed items were identified through a search of relevant state and federal statutory and non-statutory heritage registers/databases:

- World Heritage List (WHL)
- Commonwealth Heritage List (CHL)
- National Heritage List (NHL)
- State Heritage Register (SHR)
- Section 170 Heritage and Conservation Registers
- NSW State Heritage Inventory database
- Local Environmental Plans (LEPs).

2.3 Summary of heritage listings

The results of the register searches undertaken on 5 June 2024 are presented in Table 1. The distance of the relevant work locations to each heritage item is also provided. The heritage curtilages of these items and the nearby works are shown in Section 2.4.

It is noted that the register listing details for some items are different from the EIS and SPIR assessments due to changes to LGA boundaries and government agency registers, such as the Transport Asset Holding Entity (formerly Railcorp) Section 170 Heritage and Conservation Register. In the case of 'Turpentine - Ironbark Forest Understory' near Dulwich Hill Station, this item was not listed on the LEP at the time the EIS and SPIR were prepared.

Heritage items in Table 1 that are in bold are items that were not identified in the register search results in the EIS and SPIR impact assessments.

Table 1: Results of register searches for the study area

Item	Listings	Significance	Distance to works
Marrickville Railway Station Group	- SHR (01186) - TAHE s170 Register (SHI 4801091) - Inner West LEP 2022 (I1241)	State	Within Illawarra Rd Bridge
Inter-War Group Heritage Conservation Area—Hollands Avenue; Jocelyn Avenue and Woodbury Street	Inner West LEP 2022 (C67)	Local	17m N of Livingstone Rd Bridge
South Dulwich Hill Heritage Conservation Area	Inner West LEP 2022 (C107)	Local	Within CI-158, CI-164 CI-020 and Albermarle St Bridge, adjacent to Wardell Rd Bridge
Dulwich Hill Railway Station Group	- TAHE s170 Register (SHI 4801909) - Inner West LEP 2022 (I1024)	Local	Within CI-019, CI-159 CI-021, and Wardell Rd Bridge
Turpentine - Ironbark Forest Understory	Inner West LEP 2022 (I1222)	Local	Within CI-019
Gladstone Hall, including interiors	Inner West LEP 2022 (I1008)	Local	20m S of CI-027
Duntroon Street Heritage Conservation Area	Inner West LEP 2022 (C3)	Local	3m NW of Garnet St Bridge works
Crinan Street Shops Heritage Conservation Area	Inner West LEP 2022 (C2)	Local	23m N of Duntroon St Bridge
Floss Street Heritage Conservation Area	Inner West LEP 2022 (C4)	Local	13m S of Duntroon St Bridge
Inter war building - The Chambers	Inner West LEP 2022 (I177)	Local	20m S of Duntroon St Bridge
Hurlstone Park Railway Station Group	- TAHEs170 Register (SHI 4802051) - Canterbury-Bankstown LEP 2023 (I175)	Local	Adjacent to Duntroon St Bridge
Melford Street Heritage Conservation Area	Canterbury-Bankstown LEP 2023 (C5)	Local	Adjacent to Melford St Bridge
Canterbury Railway Station Group	- SHR (01109) - TAHE s170 Register (SHI 4801100) - Canterbury-Bankstown LEP 2023 (I90)	State	Within Canterbury Rd Bridge

Item	Listings	Significance	Distance to works
Inter-War Hotel (former Hotel Canterbury)	Canterbury-Bankstown LEP 2023 (I91)	Local	14m SE of Canterbury Rd Bridge
Federation Post Office Building (former Canterbury Post Office)	Canterbury-Bankstown LEP 2023 (I89)	Local	16m NE of Canterbury Rd Bridge
Federation house	Canterbury-Bankstown LEP 2023 (I84)	Local	24m S of CI-058
Federation villa	Canterbury-Bankstown LEP 2023 (I85)	Local	21m S of CI-060
Inter war commercial building - Station House	Canterbury-Bankstown LEP 2023 (I65)	Local	23m S of CI-061
Campsie Railway Station Group	- TAHE s170 Register (SHI 4801101) - Canterbury-Bankstown LEP 2023 (I63)	Local	Within CI-075 and 8m E of CI-077
Belmore Railway Station Group	- SHR (01081) - TAHE s170 Register (SHI 4801084) - Canterbury-Bankstown LEP 2023 (I33)	State	Within CI-086 and Burwood Rd Bridge
Federation House (former station master's cottage)	Canterbury-Bankstown LEP 2023 (I32)	Local	6m W of Burwood Rd Bridge
Post-war bus shelter and public lavatories	Canterbury-Bankstown LEP 2023 (I51)	Local	Within CI-086, 20m E of Burwood Rd Bridge
Lakemba Railway Station Group	- TAHE s170 Register (SHI 4801916) - Canterbury-Bankstown LEP 2023 (I208)	Local	Within CI-106 and Haldon St Bridge, 12m W of CI-103
Wiley Park Railway Station Group	- TAHE s170 Register (SHI 4801946) - Canterbury-Bankstown LEP 2023 (I236)	Local	Within CI-119, CI-120, CI-121, and King Georges Rd Bridge
Lakemba Water Pumping Station (WP0003)	- Sydney Water s170 Register (SHI 4570136) - Canterbury-Bankstown LEP 2023 (I235)	Local	21m S of CI-121
War memorial and street trees	Canterbury-Bankstown LEP 2023 (I222)	Local	23m SW of CI-127
Punchbowl Railway Station Group	- TAHE s170 Register (SHI 4802067) - Canterbury-Bankstown LEP 2023 (I226)	Local	Within CI-136 and Punchbowl Rd Bridge, 20m E of CI-141

2.4 Heritage curtilages

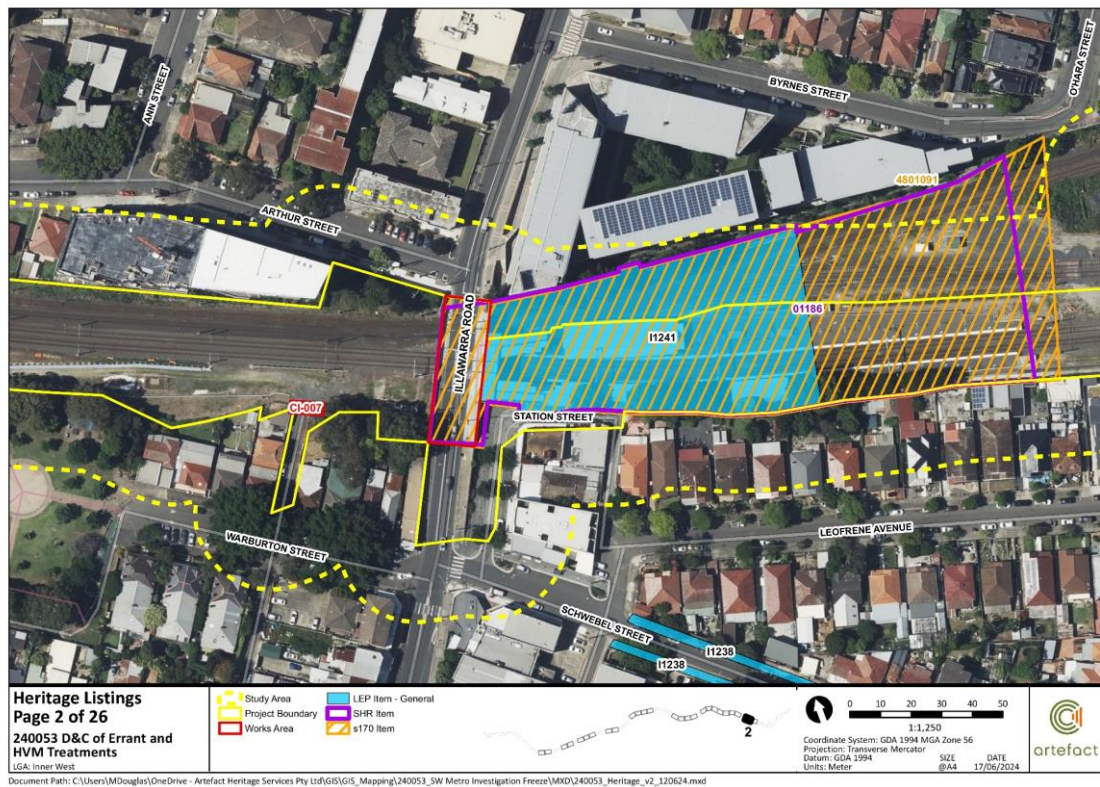


Figure 2: Heritage items near Illawarra Road Bridge



Figure 3: Heritage Items near Livingstone Road Bridge



Figure 4: Heritage items near Albermarle Street Bridge



Figure 5: Heritage items near Wardell Road Bridge

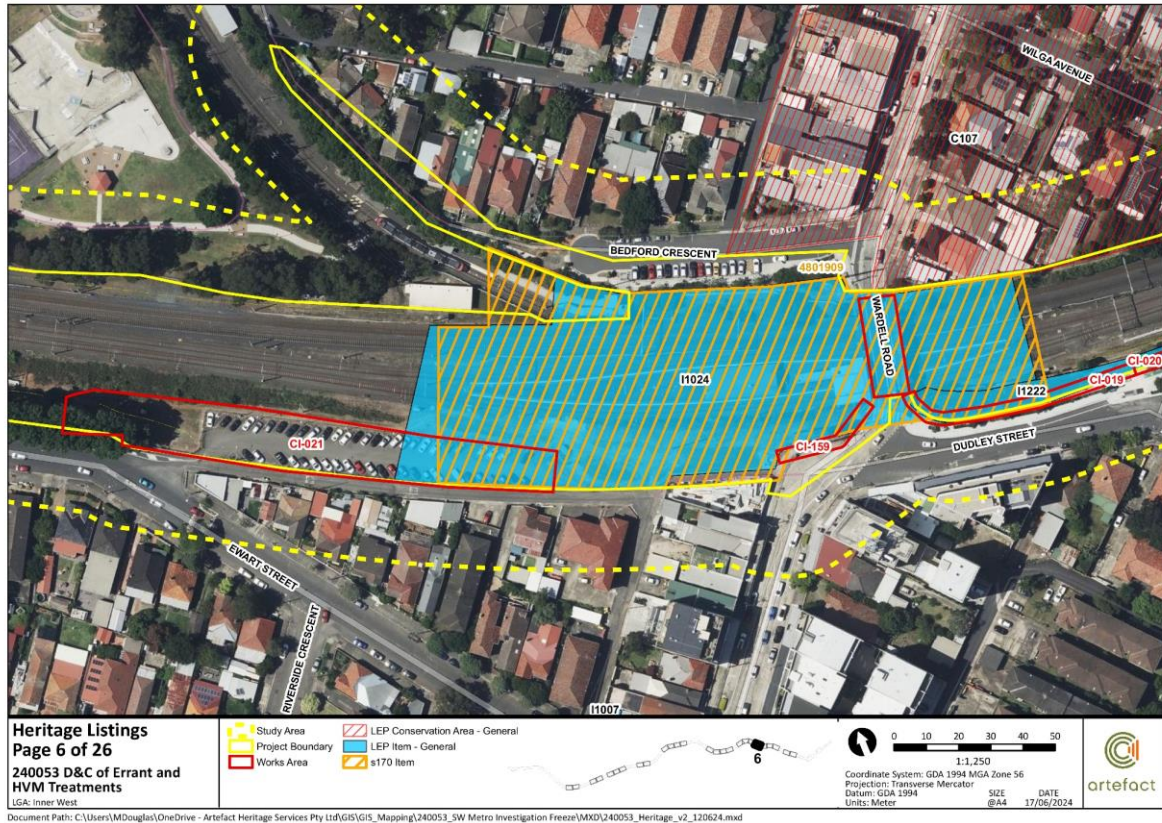


Figure 6: Heritage items near Wardell Road Bridge



Figure 7: Heritage items near Ewart Street



Figure 8: Heritage items near Garnet Street



Figure 9: Heritage items near Duntroon Street



Figure 10: Heritage items near Melford Street

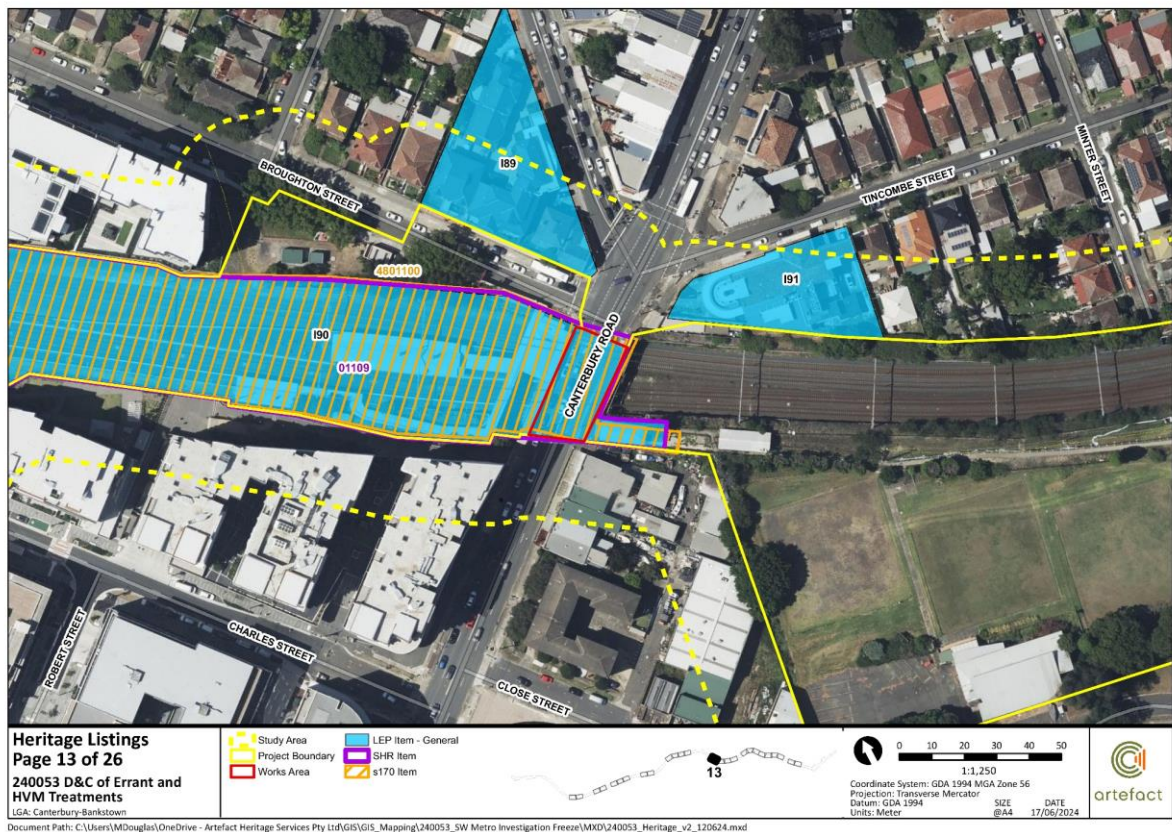


Figure 11: Heritage items near Canterbury Road

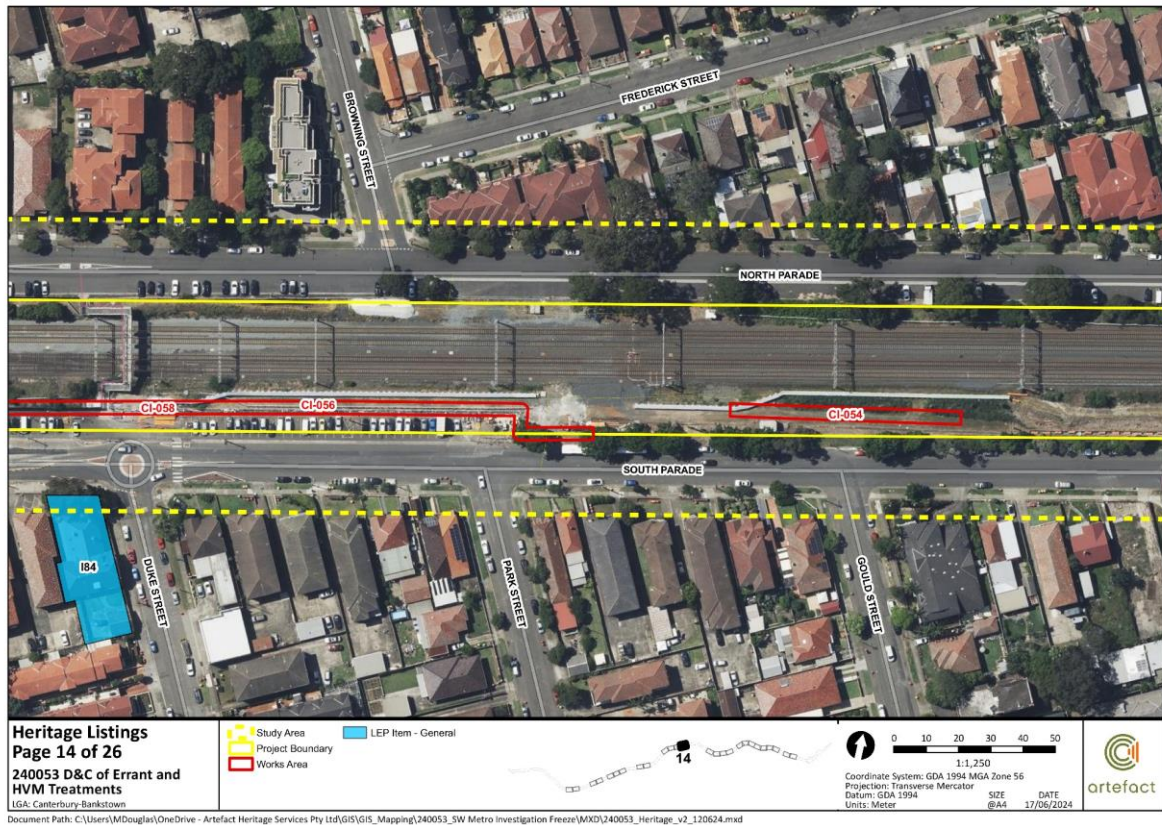


Figure 12: Heritage items near South Parade



Figure 13: Heritage items near South Parade

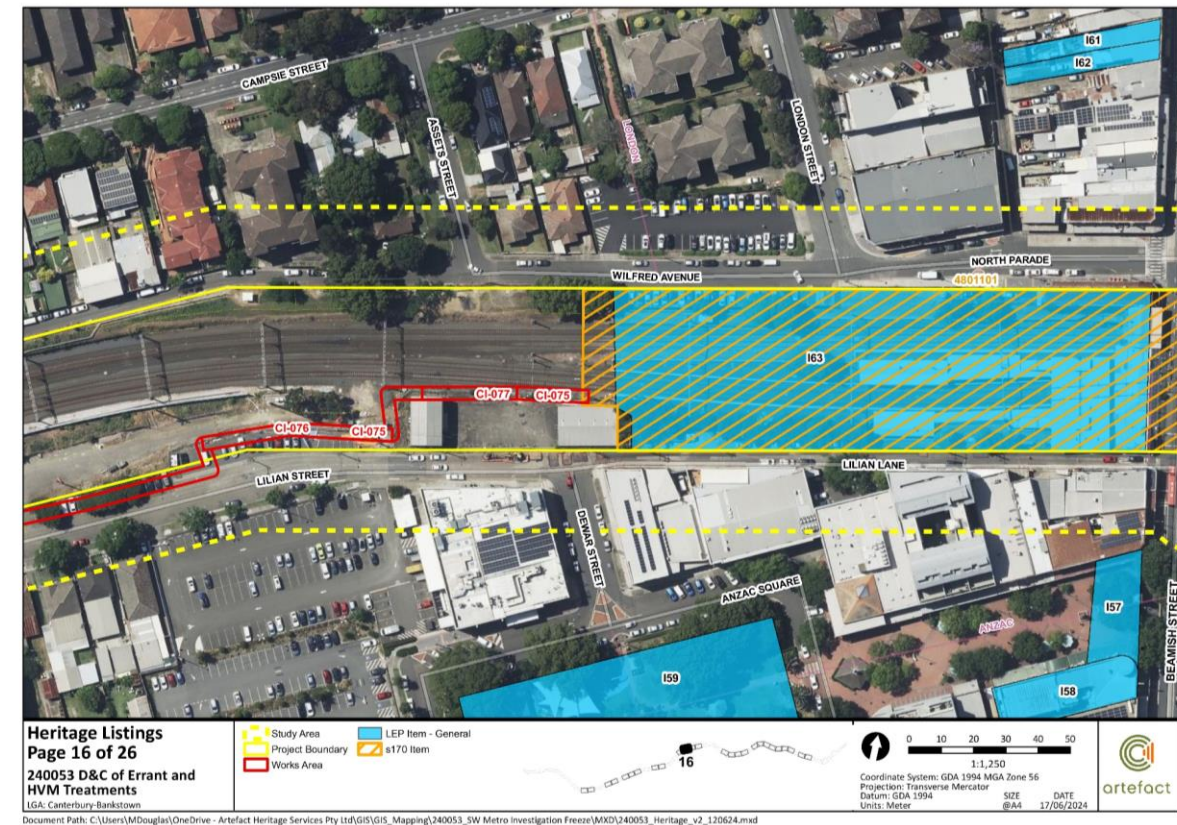


Figure 14: Heritage items Lilian Lane

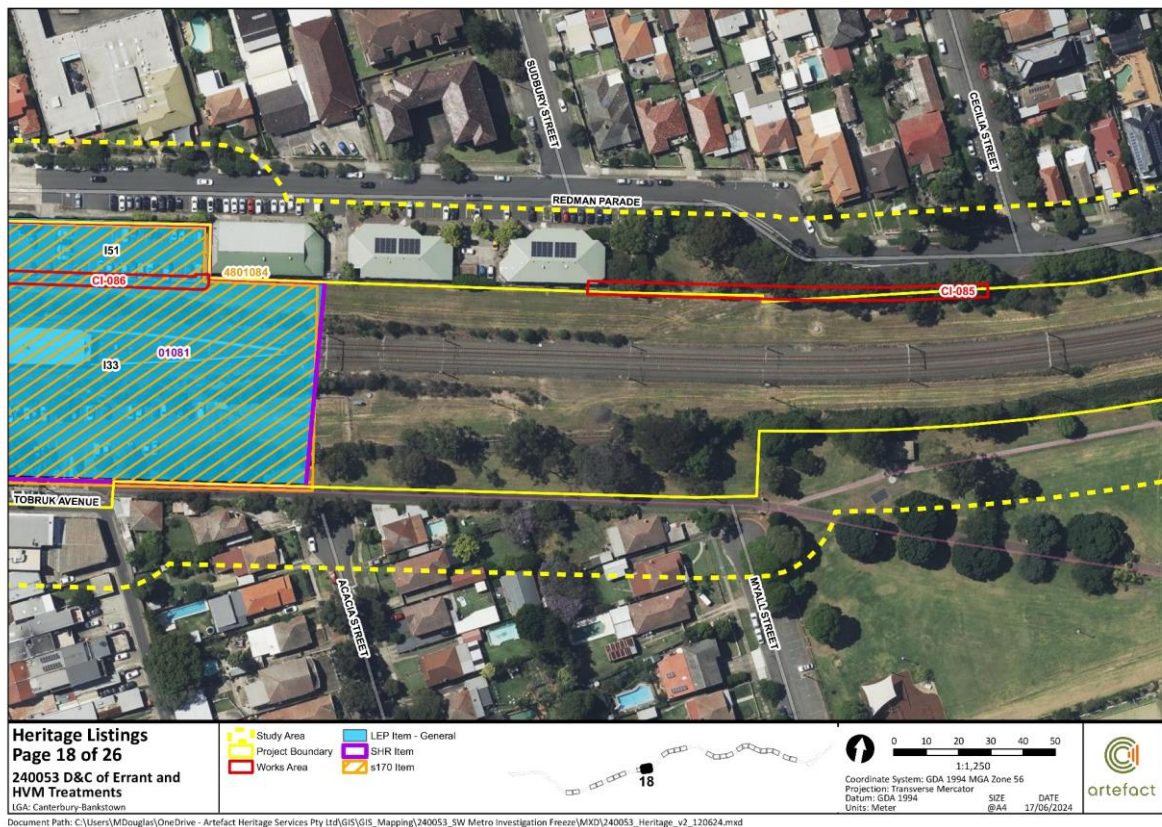


Figure 15: Heritage items near Redman Parade

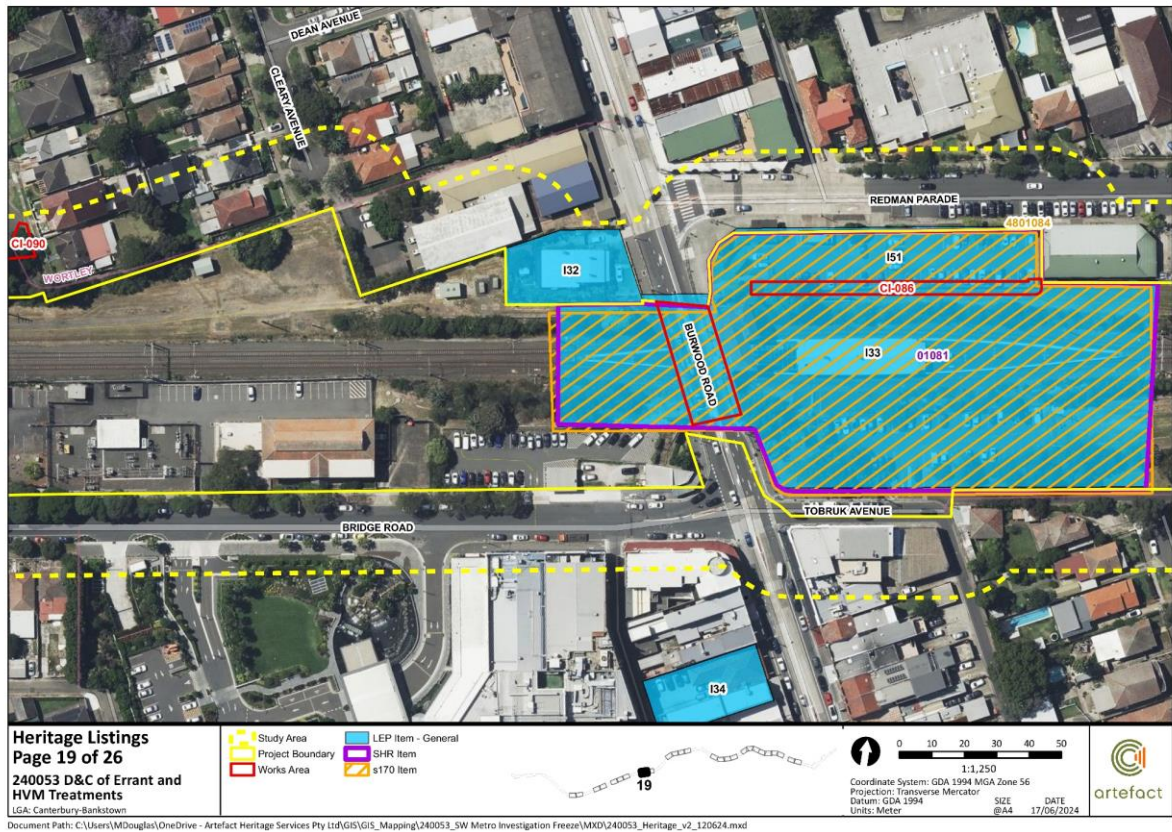


Figure 16: Heritage items near Burwood Road

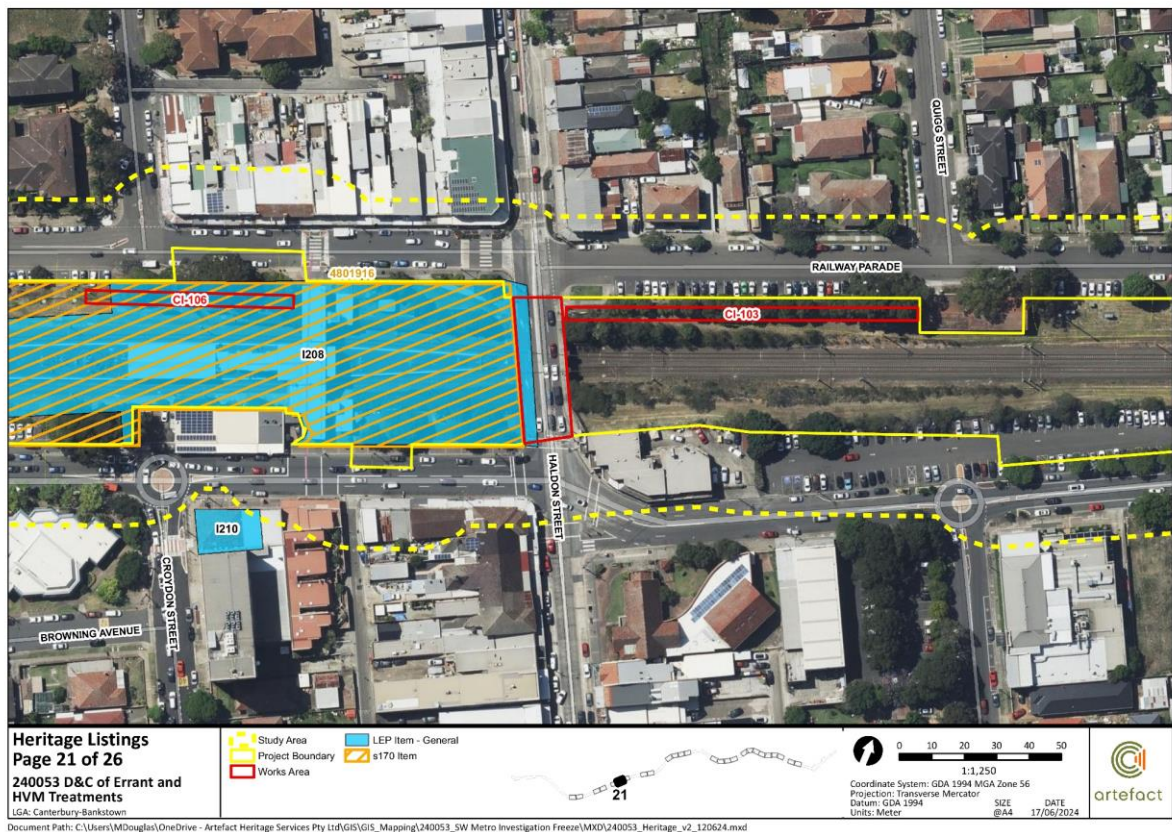


Figure 17: Heritage items near Haldon Street



Figure 18: Heritage items near King Georges Road

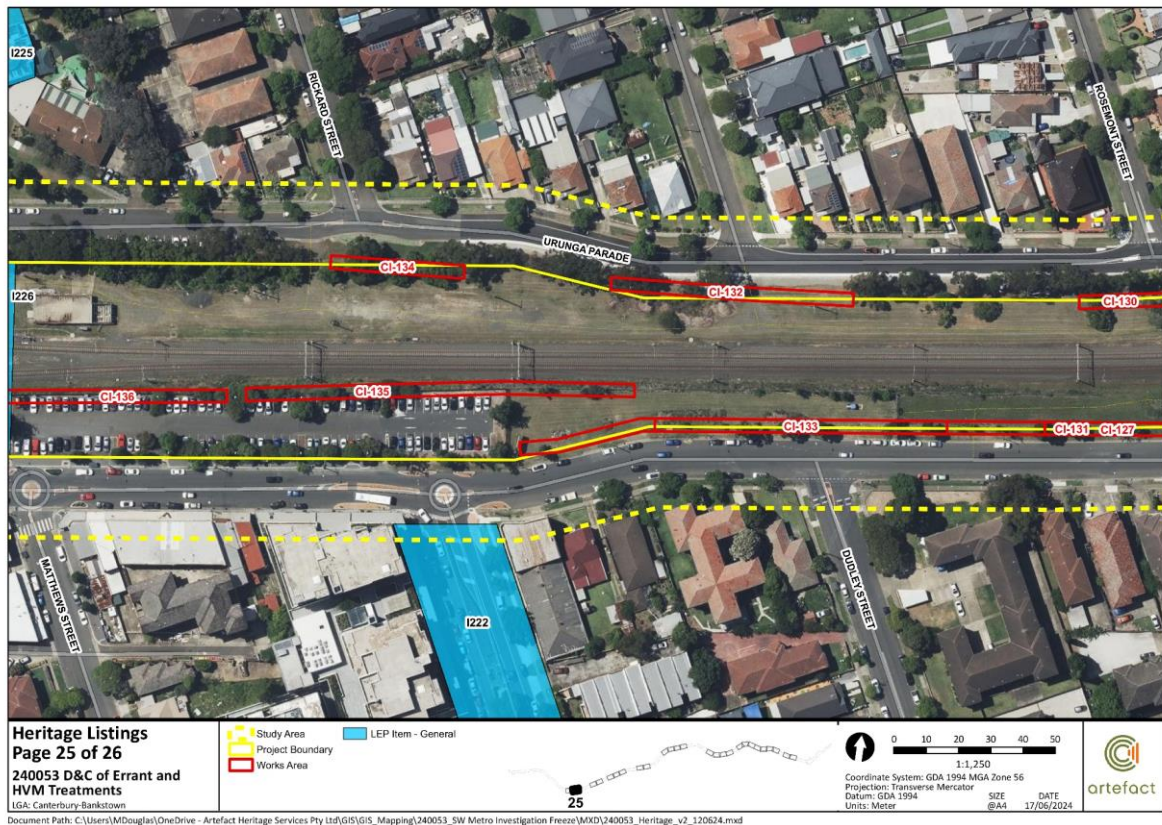


Figure 19: Heritage items near Dudley Street

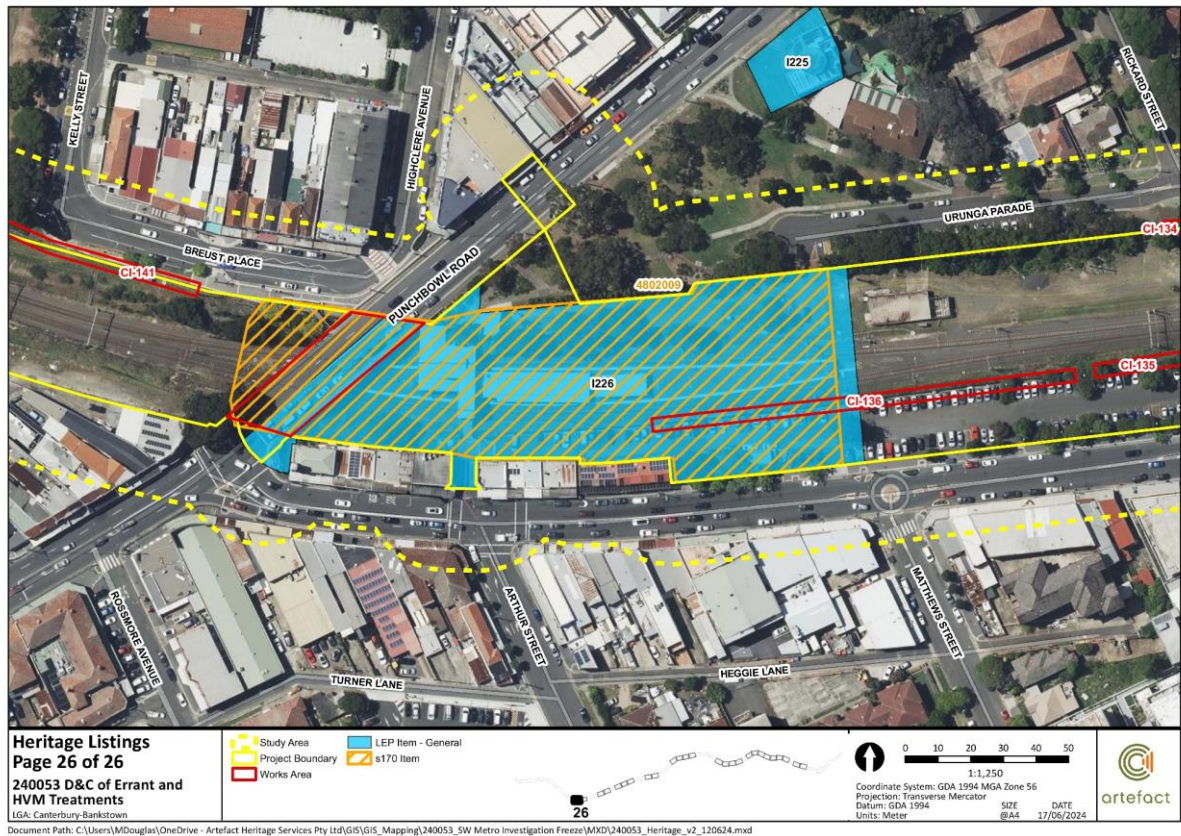


Figure 20: Heritage items near Punchbowl Road

3.0 ARCHAEOLOGICAL ASSESSMENT

3.1 Introduction

Assessments of non-Aboriginal archaeological potential and archaeological management strategies have been sourced from the SWM AARD.⁸ The AARD identified four archaeological station catchments (Marrickville, Canterbury, Belmore, and Lakemba), with the remainder of the project alignment being within the Bankstown Line Catchment. These archaeological catchments were divided into management zones based on the level of assessed archaeological potential and significance.

The areas of Aboriginal archaeological potential have been sourced from the SWM ACHAR.

3.2 Marrickville Station Catchment

3.2.1 Potential archaeological remains at Marrickville Station

The AARD predicted archaeological remains of local significance to be present at Marrickville Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 2 and the location of these archaeological resources is provided in Figure 21.

Table 2: Summary of areas with potential for significant archaeological remains for Marrickville Station⁹

Phase	Archaeological resource	Potential	significance
1 (1788-1850s)	Archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters	Nil-low	Unlikely to reach the threshold for local significance
2 (1850s – 1890s)	Archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek	Nil-low	Unlikely to reach the threshold for local significance
3 (1890s – 1920s)	- Archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, utilities such as woodstave sewer or ceramic pipes; brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. - Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, high original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings - Moderate potential for footings of former platform canopies - Low potential for former level crossing at the current Illawarra Road overbridge	Moderate-	Local

⁸ Artefact 2018b.

⁹ Artefact 2018b: Table 3-4.

Phase	Archaeological resource	Potential	significance
4 (1930s – present)	Archaeological remains of the former Earlwood tram line that ran across Illawarra Road overbridge such as tram tracks and associated infrastructure		
	- Low potential for footings of former coal loading and storage facilities - Low potential for archaeological remains of the former sleeper bridge such as bridge footings	Low	Unlikely to reach the threshold for local significance
	- Archaeological remains associated with upgrades such as utilities and drainage - Footings associated with the commuter car parking structure and the Illawarra Road footbridge - Footings of signalling huts and boxes	Moderate-high	Unlikely to reach the threshold for local significance
	Archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts	Moderate	Local

3.2.2 Archaeological management strategy for works at Marrickville Station

The AARD assessed potential impacts to archaeological resources at Marrickville Station from the works required as part of the project. The archaeological management policies are outlined in Table 3 and the location of the archaeological management zones are illustrated in Figure 22.

Table 3: Summary of archaeological management requirements at Marrickville Station Catchment¹⁰

Phase	Potential archaeology	Management zone	Mitigation
1 (1788-1850s)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
2 (1850s – 1890s)	Nil to low potential for archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
3 (1890s – 1920s)	Moderate to high potential for potentially local significant archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track.	1	- AMS - Salvage excavations

¹⁰ Artefact 2018b: Table 8-2.

Phase	Potential archaeology	Management zone	Mitigation
4 (1930s – present)	Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings. Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge. Moderate potential for archaeological remains of the former Earlwood tram line that ran across Illawarra Road overbridge such as tram tracks and associated infrastructure		
	Low potential for footings of former coal loading and storage facilities Low potential for archaeological remains of the former sleeper bridge such as bridge footings.	3	Unexpected Finds Procedure
	Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage, footings of signalling huts and boxes, and footings associated with the commuter car parking structure and the Illawarra Road footbridge. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
	Moderate potential for locally significant archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts.	2	- AMS - Test/Salvage Excavations

Figure 21: Archaeological potential for Marrickville Station Catchment¹¹



¹¹ Artefact 2018b: Figure 3-23.

Figure 22: Marrickville Station Catchment archaeological management zones¹²



¹² Artefact 2018b: Figure 8-1.

3.3 Canterbury Station Catchment

3.3.1 Potential archaeological remains at Canterbury Station

The AARD predicted archaeological remains of State and local significance to be present at Canterbury Station (including the Canterbury Construction Site). A summary of the archaeological potential and significance of predicted remains is provided in Table 4, and the location of these archaeological resources is provided in Figure 23 and Figure 24.

Table 4: Summary of areas with potential for significant archaeological remains for Canterbury Station¹³

Phase	Archaeological resource	Potential	Significance
1 (1788-1841)	Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters.	Nil-low	Unlikely to reach the threshold for local significance
2 (1841 – 1855)	- Archaeological remains of timber slab huts, outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works - Archaeological remains of the outbuildings such as footings, timber slabs remnants, stone fireplaces, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fencelines, and yard surfaces - Evidence of small scale mining activities - Archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters - Archaeological remains of early residential cottages including wells, cisterns and refuse pits	Moderate to High	Potentially State
3 (1855 – 1895)	- Archaeological remains of early residential cottages including wells, cisterns and refuse pits - Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Blackett and Co Canterbury Engineering Works	Moderate to High	Potentially local
4 (1895-1943)	- Archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers - Archaeological remains of former platform structures - Archaeological remains of the former race platform and retaining wall - Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings - Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track	Moderate	Potentially local

¹³ Artefact 2018b: Table 4-3.

Phase	Archaeological resource	Potential	Significance
	- Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track - It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.		
5 (1943-present)	Archaeological remains associated with upgrades such as utilities and drainage	Moderate to high	Unlikely to reach the threshold for local significance

3.3.2 Archaeological management strategy for works at Canterbury Station

The AARD assessed potential impacts to archaeological resources at Canterbury Station from the works required as part of the project. The archaeological management policies are outlined in Table 5 and the location of the archaeological management zones are illustrated in Figure 25.

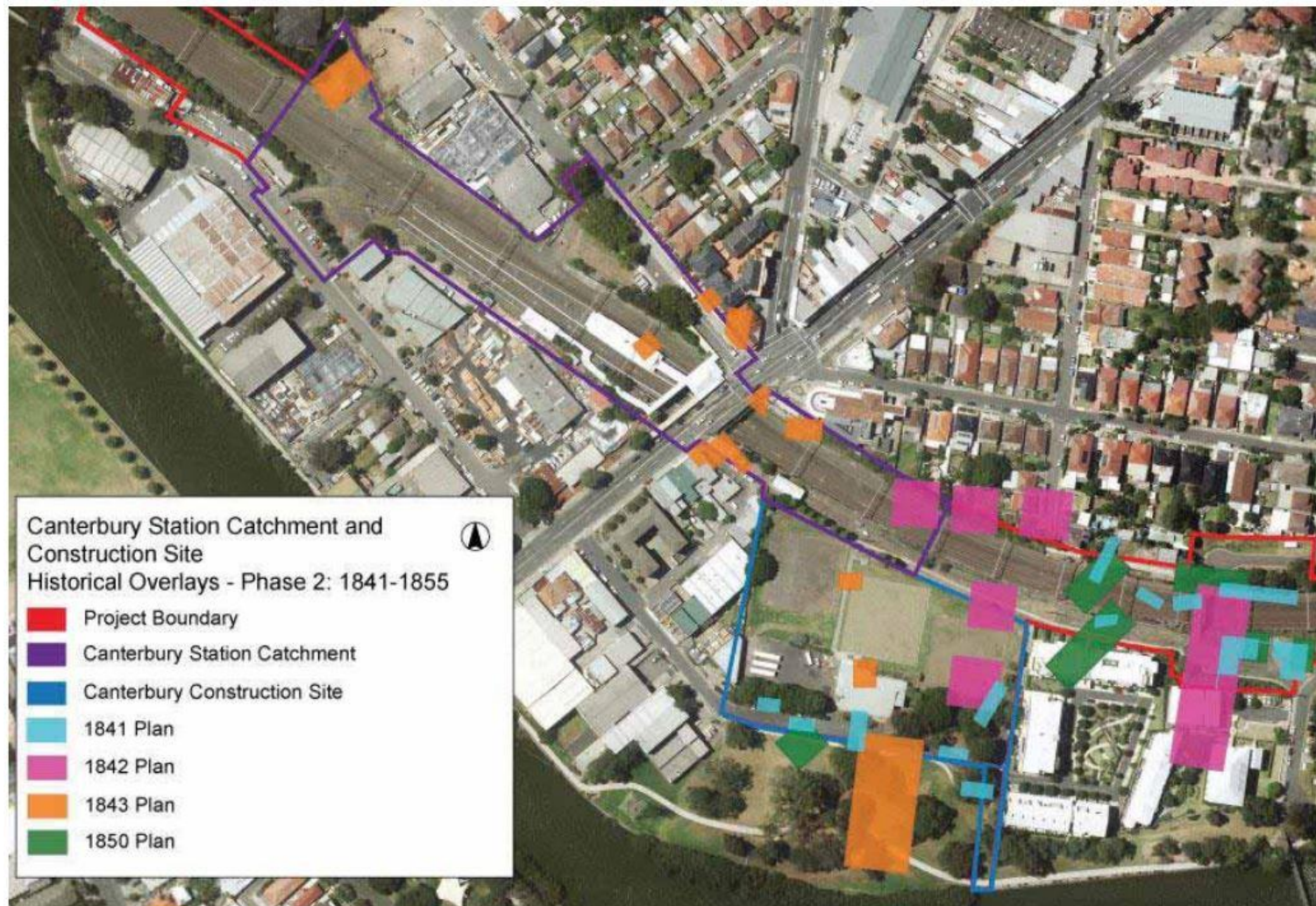
Table 5: Summary of archaeological management requirements at Canterbury Station Catchment¹⁴

Phase	Potential archaeology	Management zone	Mitigation
1 (1788-1841)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance	3	Unexpected Finds Procedure
2 (1841 – 1855)	Moderate to high potential for potentially State significant archaeological remains of timber slab huts, outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works. Archaeological remains of the outbuildings such as footings, timber slabs remnants, stone fireplaces, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fence lines, and yard surfaces. Evidence of small scale mining activities, archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. Archaeological remains of early residential cottages including wells, cisterns and refuse pits.	1	- AMS - Salvage excavations
3 (1855 – 1895)	Moderate to high potential for potentially locally significant archaeological remains of early residential cottages including wells, cisterns and refuse pits. Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural	1	- AMS - Salvage excavations

¹⁴ Artefact 2018b: Table 8-3.

Phase	Potential archaeology	Management zone	Mitigation
	remains associated with the Blackett and Co Canterbury Engineering Works.		
4 (1895-1943)	Moderate potential for locally significant archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers. Archaeological remains of former platform structures. Archaeological remains of the former race platform and retaining wall. Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings. Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track. Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.	2	- AMS - Test/Salvage Excavations
5 (1943-present)	Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure

Figure 23: Location of the former historical structures within the Canterbury Station Catchment, including the Canterbury Construction Site¹⁵



¹⁵Artefact 2018b: Figure 4-20.

Figure 24: Archaeological potential for Canterbury Station Catchment¹⁶



¹⁶Artefact 2018b: Figure 4-22.

Figure 25: Canterbury Station Catchment archaeological management zones¹⁷



¹⁷ Artefact 2018b: Figure 8-2.

3.4 Belmore Station Catchment

3.4.1 Potential archaeological remains at Belmore Station

The AARD predicted archaeological remains of local significance to be present at Belmore Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 6 and the location of these archaeological resources is provided in Figure 26.

Table 6: Summary of areas with potential for significant archaeological remains for Belmore Station¹⁸

Phase	Archaeological resource	Potential	Significance
1 (1788-1880s)	Archaeological features associated with low intensity land use such as grazing and farming including tree boles, fence line postholes, field drains and isolated artefact scatters	Nil-low	Unlikely to reach the threshold for local significance
2 (1880s – 1920s)	- Archaeological features associated with continued grazing and farming including fence line and shed postholes, field drains, isolated artefact scatters and drain culverts - Archaeological remains of early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track - Archaeological remains associated with the railway station goods shed and goods platform occupying land to near today's Wortley Avenue and a goods platform to the south near Bridge Road, such as rail tracks, timber sleepers, footings of the platform, engine pit and other rail infrastructure - Archaeological remains located on the 1925 plan such as converter room, coal bin, ash pit, lamp shed, auto box, land agent, boot maker, toilets and brick culvert. Archaeological remains could include footings, cuts of the pit, drains, ceramic service pipes and the brick culvert - Archaeological remains of former platform structures - Archaeological remains located within the platform structure such as footings of former footbridge, fences, and footings of the building that was originally located under the stairs - Archaeological remains of tank located to the north of the station	Nil-low	Potentially Local
3 (1930s – present)	Archaeological remains associated with upgrades such as utilities and drainage	Moderate	Unlikely to reach the threshold for local significance

¹⁸ Artefact 2018b: Table 5-3.

3.4.2 Archaeological management strategy for works at Belmore Station

The AARD assessed potential impacts to archaeological resources at Belmore Station from the works required as part of the project. The archaeological management policies are outlined in Table 7 and the location of the archaeological management zones are illustrated in Figure 27.

Table 7: Summary of archaeological management requirements at Belmore Station Catchment¹⁹

Phase	Potential archaeology	Management zone	Mitigation
1 (1788-1880s)	Nil to low potential for archaeological features associated with low intensity land use such as grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
2 (1880s – 1920s)	Low to moderate potential for Archaeological features associated with continued grazing and farming include fence line and shed postholes, field drains, isolated artefact scatters and drains or culverts. Archaeological remains of early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Archaeological remains associated with the railway station goods shed and goods platform occupying land to the near today's Wortley Avenue and a goods platform to the south near Bridge Road, such as rail tracks, timber sleepers, footings of the platform, engine pit, and other rail infrastructure. Archaeological remains located on the 1925 plan such as converter room, coal bin, ash pit, lamp shed, auto box, land agent, boot maker, toilets, and brick culvert. Archaeological remains could include footings, cuts of the pit, drains, ceramic service pipes, and the brick culvert. Archaeological remains of former platform structures. Archaeological remains located within the platform structure such as footings of former footbridge, fences, and footings of the building that was originally located under the stairs. Archaeological remains of tank located to the north of the station. Archaeological remains of the early goods shed and siding have the potential to reach local significance.	2	- AMS - Monitoring or test / salvage excavations
3 (1930s – present)	Moderate potential for archaeological remains associated with upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure

¹⁹ Artefact 2018b: Table 5-4.

Figure 26: Archaeological potential for Belmore Station Catchment²⁰



²⁰Artefact 2018b: Figure 5-10.

Figure 27: Belmore Station Catchment archaeological management zones²¹



²¹ Artefact 2018b: Figure 8-3.

3.5 Lakemba Station Catchment

3.5.1 Potential archaeological remains at Lakemba Station

The AARD predicted archaeological remains of local significance to be present at Lakemba Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 8 and the location of these archaeological resources is provided in Figure 28.

Table 8: Summary of areas with potential for significant archaeological remains for Lakemba Station²²

Phase	Archaeological resource	Potential	Significance
1 (1788-1880s)	- Initial land owners associated with moderately sized land grants used for agricultural and pastoral purposes - Archaeological features associated with low intensity land use such as timber getting, grazing and farming including tree boles, fence line postholes, field drains and isolated artefact scatters	Nil-low	Unlikely to reach the threshold for local significance
2 (1880s – 1909)	- Establishment of the Taylor House (Lakemba). Stables and potential outbuildings - Archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts	Low	Potentially Local
3 (1909 – 1919)	Archaeological remains associated with the first timber island platform and initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track	Low - Moderate	Potentially Local
4 (1919 – present)	Archaeological remains associated with station and rail corridor upgrades such as utilities and drainage	Moderate	Unlikely to reach the threshold for local significance

3.5.2 Archaeological management strategy for works at Lakemba Station

The AARD assessed potential impacts to archaeological resources at Lakemba Station from the works required as part of the project. The archaeological management policies are outlined in Table 9 and the location of the archaeological management zones are illustrated in Figure 29.

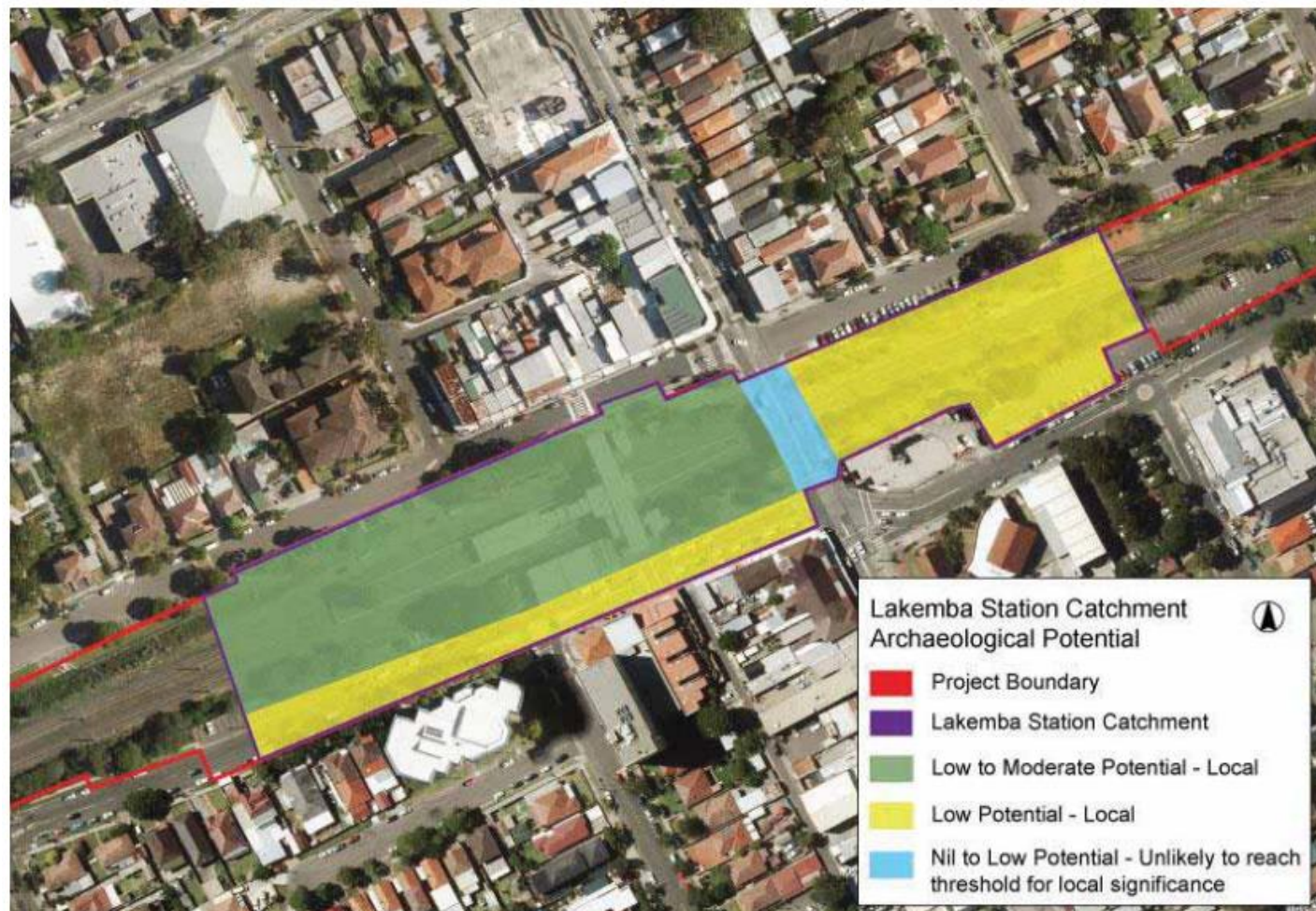
²² Artefact 2018b: Table 6-3.

Table 9: Summary of archaeological management requirements at Lakemba Station Catchment²³

Phase	Potential archaeology	Management zone	Mitigation
1 (1788-1880s)	Nil to low potential for archaeological remains associated with the initial land owners associated with moderately sized grants used for agricultural and pastoral purposes. Archaeological features associated with low intensity land use such as timber getting, grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
2 (1880s – 1909)	Low potential for locally significant archaeological remains associated with the establishment of the Taylor House (Lakemba), stables and potential outbuildings. Archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts.	3	Unexpected Finds Procedure
3 (1909 – 1919)	Low to moderate potential for locally significant archaeological remains associated with the first timber island platform and initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track.	2	- AMS - Monitoring or test / salvage excavation
4 (1919 – present)	Moderate potential for archaeological remains associated with station and rail corridor upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance	3	Unexpected Finds Procedure

²³ Artefact 2018b: Table 5-4.

Figure 28: Archaeological potential for Lakemba Station Catchment²⁴



²⁴Artefact 2018b: Figure 6-18.

Figure 29: Lakemba Station Catchment archaeological management zones²⁵



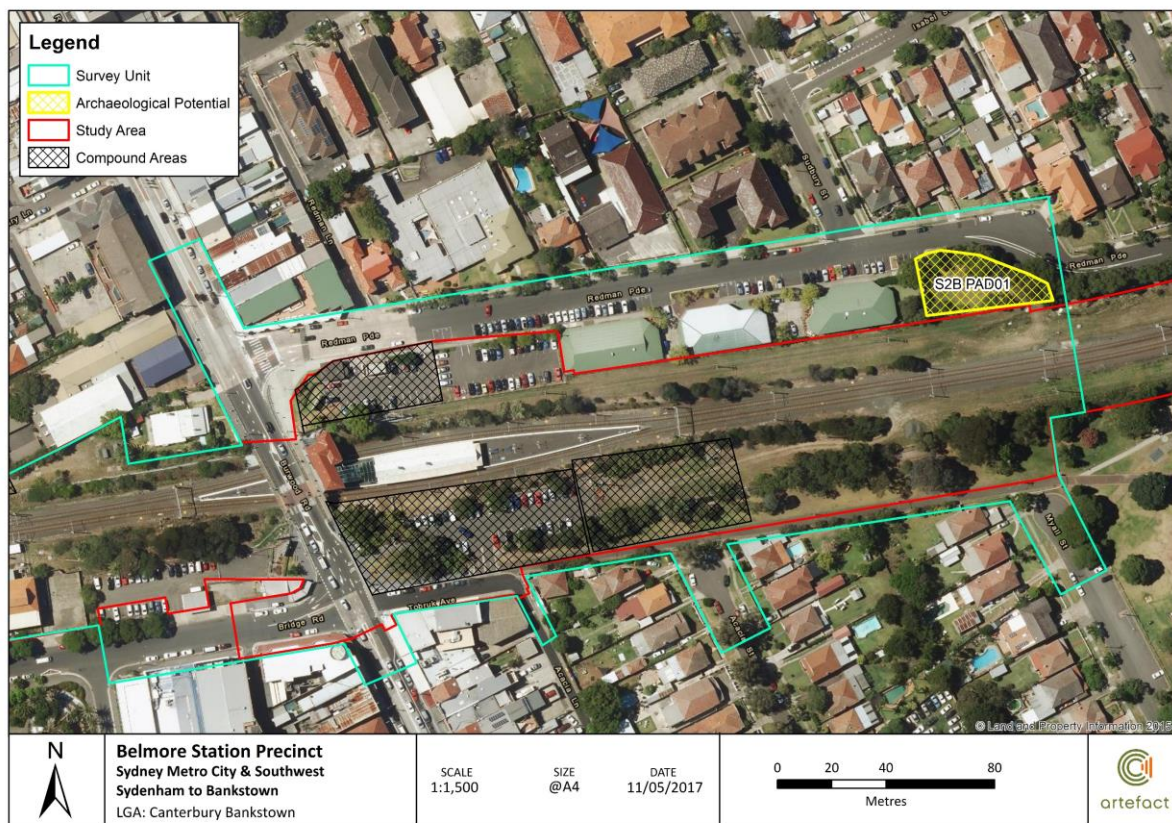
²⁵ Artefact 2018b: Figure 8-4.

3.6 Aboriginal archaeological potential

The ACHAR prepared for the project did not identify any previously recorded Aboriginal sites located along the project alignment. The ACHAR did however identify two areas of Aboriginal potential archaeological deposit (PAD), S2B PAD01 and S2B PAD02. S2B PAD01 consisted of a small grassed area (Lot 11/DP802657) located between the rail corridor and Redman Parade to the east of Belmore Station, near Sudbury Street. S2B PAD01 was assessed as having low to moderate potential, and the indicative archaeological significance was considered to be low to moderate. S2B PAD02 consisted of the south-western corner of Warren Park to the north of Punchbowl Station. It was assessed as having low to moderate potential, and the indicative archaeological significance was considered to be moderate. Subsequent archaeological test excavation undertaken at S2B PAD02 as part of the wider SWM project did not identify any subsurface Aboriginal objects and determined that S2B PAD02 was not a site.²⁶ S2B PAD01 was not planned to be impacted by the project however, and as a result archaeological test excavations have never been undertaken to verify if subsurface Aboriginal objects are present.

The remainder of the project alignment outside of S2B PAD01 and S2B PAD02 was assessed as having nil to low archaeological potential.

Figure 30: Location of S2B PAD01²⁷



²⁶ Artefact, 2024. *Sydney Metro City & Southwest – Southwest Metro: Package 5 & 6. Aboriginal Heritage Report*. Report to Downer Group on behalf of Sydney Metro.

²⁷ Artefact 2018c: Figure 7.

4.0 PROPOSED WORKS

4.1 Introduction

This section provides a summary of the planned errant and hostile vehicle treatment works required for the project. The works are divided between planned overbridge locations and the non-bridge locations located along the project alignment.

4.2 Bridge locations

The planned errant and hostile vehicle treatment works include activities at 15 overbridge locations across the overall Bankstown line. The degree of work varies in complexity across the 15 overbridge sites, based on the structural condition of the existing overbridge and the ability to integrate and/or accommodate the planned works. Most locations would require remedial works to the bridges, and installation of new safety infrastructure in place of existing safety screens and rails. The new safety infrastructure would include a combination of TL3 and TL4 concrete and steel rail barrier systems, new integrated vertical safety screens, new bollards, and the modification of existing bridge elements such as paving, footpaths, kerbs, retaining walls, parapet walls, and balustrades. In some locations piling and the construction of piling caps would be needed to support new safety infrastructure. It is noted that not all of these works will be required at every location.

The location and general scope of each set of overbridge works and summary of heritage constraints is outlined in Table 10. More details of the works planned at individual bridge locations is provided as part of the impact assessments in Section 5.2.1.

4.3 Non-bridge locations

The planned errant and hostile vehicle treatment works have divided the 66 non-bridge locations into east and west package across the overall Bankstown line. The east package focuses on the non-bridge area from Marrickville Station to Lakemba Station, whilst the west package focuses on the non-bridge area from Lakemba Station to Bankstown Station.

The treatment is to design different types of barriers to mitigate risks associated with road vehicles intruding into the rail corridor and causing derailment of Sydney Metro and ARTC trains. The road barriers typically include TL3 post and beam barriers, TL4 steel post and beam barriers, TL3 concrete barriers, TL4 concrete barriers, and TL5 concrete barriers. The installation of these barriers would require ground penetrations where they are installed. The installation of new barriers would involve the removal of existing fences in these locations where present.

The location and scope of each non-bridge works and summary of heritage constraints is outlined in Table 10.



Figure 31: East and west package areas for non-bridge locations (Source: Aurecon, DP941 Non-bridge areas – East Design Report, p. 11)

4.4 Project justification

Sydney Metro have undertaken a Corridor Intrusion Risk Assessment (CIRA) to identify locations along the southwest corridor vulnerable to the risk of errant and/or hostile vehicles entering the rail corridor. The assessment recommended infrastructure upgrades as treatments to mitigate the risk of errant and hostile vehicles. The objective of the SWM4 project is the design and construction of errant and hostile vehicle mitigation treatments for SWM, the result of the CIRA, and comprises the security upgrades to the southwest corridor rail and station infrastructure and adjacent road network infrastructure to enable the conversion from heavy rail to meet minimum operating standards for automated Metro operations.

4.5 Summary of work locations

Table 10 provides a summary of the work locations and identifies which ones feature heritage constraints that are assessed for impact in this report. Locations with heritage constraints are shaded grey. The remaining locations are not located within 25m of any heritage items and are located within the Bankstown Line Catchment.

Table 10: Summary of work locations and heritage constraints

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Bridge	921	Marrickville	Illawarra Road	TL3	Concrete and steel rail barrier and bollard installations	East	52	Heritage item Marrickville Station Catchment
Bridge	931	Southwest Metro Corridor (SMC)	Livingstone Road	TL3	Steel rail barrier installation	East	35	Heritage item
Bridge	932	SMC	Albermarle Street	TL3	Concrete and steel rail barrier, and safety screen installation	East	30	Heritage item
Bridge	933	Dulwich Hill	Garnet Street	TL3 & TL4	Concrete and steel rail barrier installation	East	26	Heritage item
Bridge	922	Dulwich Hill	Wardell Road	TL4	Steel rail barrier, bollard and safety screen installation. Remove extant safety screens	East	34	Heritage item
Bridge	923	Hurlstone Park	Duntroon Street	TL4	Concrete barrier, bollard and safety screen installation. Remove extant safety screens	East	32	Heritage item
Bridge	934	Hurlstone Park	Melford Street	TL3, TL4 & TL5	Concrete and steel rail barrier installation	East	26	Heritage item
Bridge	924	Canterbury	Canterbury Road	TL4	Concrete barrier and safety screen installation. Remove extant brick parapet wall	East	32	Heritage item Canterbury Station Catchment
Bridge	935	SMC	Loch Street	TL3 & TL4	Steel rail barrier installation	West	35	N/a
Bridge	925	Belmore	Burwood Road	TL4	Concrete and steel rail barrier, bollard and safety screen installation. Remove extant safety screens	East	33	Heritage item Belmore Station Catchment

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Bridge	936	SMC	Moreton Street	TL3 & TL4	Concrete and steel rail barrier, and safety screen installation. Remove extant safety screens	East	28	N/a
Bridge	926	Lakemba	Haldon Street	TL4 and TL5	Concrete and steel rail barrier, and safety screen installation. Remove extant safety screens	West	43	Heritage item Lakemba Station Catchment
Bridge	927	Wiley Park	King Georges Road	TL4	Concrete and steel rail barrier, and safety screen installation. Remove extant safety screens	West	32	Heritage item
Bridge	928	Punchbowl	Punchbowl Road	TL4	Steel rail barrier and safety screen installation. Remove extant safety screens	West	48	Heritage item
Bridge	937	SMC	Stacey Street	TL3 & TL4	Concrete and steel rail barrier installation	West	273	N/a
Non-bridge	CI-004	Marrickville	Riverdale Avenue	TL5	Type F concrete barrier	East	20	Marrickville Station Catchment
Non-bridge	CI-007	Marrickville	Wooley Lane	TL4	Ezy-guard steel rail barrier	East	14	Marrickville Station Catchment
Non-bridge	CI-008	SMC	Randall Street	TL4	Ezy-guard steel rail barrier	East	50	N/a
Non-bridge	CI-164	SWC	Albermarle Street northbound east side	TL3	Ezy-guard steel rail barrier	East	12	Heritage item
Non-bridge	CI-158	SWC	Albermarle Street	TL5	Type F concrete barrier	East	14	Heritage item
Non-bridge	CI-019	Dulwich Hill	Dudley Street	TL4	Ezy-guard steel rail barrier	East	85	Heritage item
Non-bridge	CI-020	SWC	School Parade	TL3	Ezy-guard steel rail barrier	East	41	Heritage item
Non-bridge	CI-159	Dulwich Hill	Wardell Road	TL5	Type F concrete barrier	East	19	Heritage item

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Non-bridge	CI-021	Dulwich Hill	Ewart Lane carpark		Bollards and wheel stops	East	54	Heritage item
Non-bridge	CI-026	SWC	Garnet Street	TL3	Ezy-guard steel rail barrier	East	40	N/a
Non-bridge	CI-027	SWC	Ewart Street	TL3	Ezy-guard steel rail barrier	East	63	Heritage item
Non-bridge	CI-036	SWC	Keir Avenue	TL4	Ezy-guard steel rail barrier	East	32	N/a
Non-bridge	CI-167	SWC	Melford Street northbound eastside	TL5	Type F concrete barrier	East	29	N/a
Non-bridge	CI-039	SWC	Sugar House Road	TL3	Ezy-guard steel rail barrier	East	75	Canterbury Station Catchment
Non-bridge	CI-054	SWC	Gould Street	TL5	Type F concrete barrier	East	69	N/a
Non-bridge	CI-056	SWC	Park Street	TL5	Type F concrete barrier	East	95	N/a
Non-bridge	CI-058	SWC	Duke Street and South Parade roundabout	TL4	Ezy-guard steel rail barrier	East	121	Heritage item
Non-bridge	CI-060	SWC	Harold Street	TL5	Type F concrete barrier	East	63	Heritage item
Non-bridge	CI-061	SWC	Beamish Lane	TL5	Type F concrete barrier	East	34	Heritage item
Non-bridge	CI-074	SWC	Lilian Lane west	TL5	Type F concrete barrier	East	160	N/a
Non-bridge	CI-075	Campsie	Lilian Lane carpark near Dewar Street	TL3	Ezy-guard steel rail barrier	East	86	Heritage item
Non-bridge	CI-076	SWC / Campsie	Lilina Street between Carrington and Dewar Streets	TL3	Ezy-guard steel rail barrier	East	237	N/a
Non-bridge	CI-077	Campsie	Dewar Street	TL5	Type F concrete barrier	East	40	Heritage item

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Non-bridge	CI-078	SWC	Carrington Street	TL5	Type F concrete barrier	East	55	N/a
Non-bridge	CI-079	SWC	Loftus Street (south)	TL5	Type F concrete barrier	East	51	N/a
Non-bridge	CI-085	SWC	Redman Parade (chicane)	TL3	Ezy-guard steel rail barrier	East	72	Belmore Station Catchment Aboriginal heritage
Non-bridge	CI-086	Belmore	Redman Parade	TL3	Ezy-guard steel rail barrier	East	82	Heritage item Belmore Station Catchment
Non-bridge	CI-090	SWC	Wortley Avenue		Bollards	East	10	Belmore Station Catchment
Non-bridge	CI-093	SWC	Brande Street	TL4	Ezy-guard steel rail barrier	East	93	N/a
Non-bridge	CI-094	SWC	Peel Street (north)	TL5	Type F concrete barrier	East	85	N/a
Non-bridge	CI-095	SWC	Peel Street (south)	TL3	Ezy-guard steel rail barrier	East	82	N/a
Non-bridge	CI-097	SWC	Taylor Street (south)	TL5	Type F concrete barrier	East	89	N/a
Non-bridge	CI-161	SWC	Moreton Street roundabout	TL5	Type F concrete barrier	East	64	N/a
Non-bridge	CI-162	SWC	Moreton Street southbound west	TL5	Type F concrete barrier	East	16	N/a
Non-bridge	CI-166	SWC	Moreton Street southbound east	TL5	Type F concrete barrier	East	16	N/a
Non-bridge	CI-098	SWC	Dennis Street (south)	TL5	Type F concrete barrier	West	65	N/a
Non-bridge	CI-100	SWC	Taylor Street (north)	TL5	Type F concrete barrier	West	87	N/a
Non-bridge	CI-101	SWC	Dennis Street (north)	TL5	Type F concrete barrier	West	73	N/a

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Non-bridge	CI-103	SWC	Railway Parade Lakemba East carpark 2	TL3	Ezy-guard steel rail barrier	West	109	Heritage item Lakemba Station Catchment
Non-bridge	CI-106	Lakemba	Croydon Street north	TL5	Type F concrete barrier	West	91	Heritage item Lakemba Station Catchment
Non-bridge	CI-113	SWC	Kathleen Street	TL5	Type F concrete barrier	West	104	N/a
Non-bridge	CI-114	SWC	Alice Street north	TL4	Ezy-guard steel rail barrier	West	65	N/a
Non-bridge	CI-115	SWC	Alice Street south	TL5	Type F concrete barrier	West	87	N/a
Non-bridge	CI-117	SWC	The Boulevarde Lakemba	TL3	Ezy-guard steel rail barrier	West	220	N/a
Non-bridge	CI-119	Wiley Park	Wiley Lane	TL3	Ezy-guard steel rail barrier	West	17	Heritage item
Non-bridge	CI-120	Wiley Park	Shadforth Street	TL4	Ezy-guard steel rail barrier	West	120	Heritage item
Non-bridge	CI-121	Wiley Park	The Boulevarde carpark Wiley Park	TL3	Ezy-guard steel rail barrier	West	45	Heritage item
Non-bridge	CI-124	SWC	Defoe Street	TL3	Ezy-guard steel rail barrier	West	72	N/a
Non-bridge	CI-125	SWC	Faux Street	TL5	Type F concrete barrier	West	72	N/a
Non-bridge	CI-127	SWC	The Boulevarde Wiley Park	TL3	Ezy-guard steel rail barrier	West	288	N/a
Non-bridge	CI-128	SWC	Robinson Street north	TL5	Type F concrete barrier	West	94	N/a
Non-bridge	CI-129	SWC	Robinson Street south	TL5	Type F concrete barrier	West	67	N/a

Location type	Reference	Adjacent / referring station precinct	Road name / location	Barrier classification	Recommended treatment option	Package	Approx. barrier length (m)	Heritage constraints
Non-bridge	CI-130	SWC	Rosemont Street north	TL5	Type F concrete barrier	West	77	N/a
Non-bridge	CI-131	SWC	Rosemont Street south	TL5	Type F concrete barrier	West	74	N/a
Non-bridge	CI-132	SWC	Dudley Street north	TL5	Type F concrete barrier	West	80	N/a
Non-bridge	CI-133	SWC	Dudley Street south	TL5	Type F concrete barrier	West	84	N/a
Non-bridge	CI-134	SWC	Rickard Street	TL4	Ezy-guard steel rail barrier	West	56	N/a
Non-bridge	CI-136	Punchbowl	Matthews Street	TL5	Type F concrete barrier	West	135	Heritage item
Non-bridge	CI-141	SWC / Punchbowl	Kelly Street / Breust Place	TL5	Type F concrete barrier	West	85	Heritage item
Non-bridge	CI-143	SWC	Stansfield Avenue	TL3	Ezy-guard steel rail barrier	West	106	N/a
Non-bridge	CI-145	SWC	Gardenia Avenue	TL5	Type F concrete barrier	West	68	N/a
Non-bridge	CI-146	SWC	Carnation Avenue	TL5	Type F concrete barrier	West	90	N/a
Non-bridge	CI-147	SWC	Wattle Street roundabout	TL3	Ezy-guard steel rail barrier	West	119	N/a
Non-bridge	CI-150	SWC	Stacey Street exit ramp	TL5	Type F concrete barrier	West	86	N/a
Non-bridge	CI-151	SWC	Lady Cutler Avenue	TL4	Ezy-guard steel rail barrier	West	88	N/a
Non-bridge	CI-153	SWC	East Terrace roundabout	TL3	Ezy-guard steel rail barrier	West	73	N/a
Non-bridge	CI-135	SWC	The Broadway	TL5	Type F concrete barrier	West	130	Heritage item

5.0 HERITAGE IMPACT ASSESSMENT

5.1 Introduction

This section provides an assessment of the heritage impacts that would occur as a result of the planned errant and hostile vehicle treatment works. This includes assessments of physical, visual, and archaeological impacts.

It is anticipated that heritage items would generally only be physically impacted by works involving treatments to heritage listed overbridges. For other work locations involving heritage items, it is expected that the works would primarily either be located outside of the heritage curtilages, and therefore would not cause physical impacts, or would be located within the heritage curtilages but would not be physically impacting significant fabric. Therefore, impacts to these items would be reduced compared to the heritage listed bridges. It is expected that potential impacts to significant non-Aboriginal archaeological remains would be limited to work locations within the four archaeological station catchments. Based on these expectations, the discussion of heritage impacts has been separated into two groups:

- Heritage items where bridge works are planned, or where works are planned on bridges adjacent to heritage listed station groups (discussed in Section 5.2.1)
- Remaining work locations within or near heritage items or archaeological catchments (discussed in Section 5.2.2).

Work locations that are not close to any heritage items within the study area are not expected to cause any heritage impacts. In addition, where works are located within the Bankstown Line Catchment, which was assessed as generally having nil to low archaeological potential, it is expected that there would be little to no impacts to significant archaeology. As a result, works that are not located within 25m of a heritage item and are located within the Bankstown Line Catchment, as identified in Table 10, do not require detailed assessment and are not discussed further in this section.

5.2 Heritage impact assessment

5.2.1 Heritage items involving bridge works

This section provides a detailed impact assessment for the heritage items that contain bridge works. An individual assessment is provided for each heritage item. Each assessment provides a physical description of the associated bridge, and a summary of the planned treatment works.

5.2.1.1 Marrickville Station

Heritage item

Marrickville Railway Station is listed on the following heritage registers as an item of State heritage significance:

- SHR as “Marrickville Railway Station Group” (SHR 01186)
- TAHE S170 Register as “Marrickville Railway Station Group” (SHI 4801909)
- Inner West LEP 2022 as “Marrickville Railway Station Group, including interiors” (LEP I1241).

Physical description

The Illawarra Road Bridge, which runs northeast- southwest above Marrickville Station consists of steel girders and a concrete slab supported on central brick piers and side brick abutments.²⁸ The existing barriers between the road and the rail corridor consist of painted brick parapet walls with steel mesh throw screens fixed to the top of the parapet walls on the eastern side of the road. The kerbing along the bridge consists of modern concrete sections and earlier sections of trachyte and sandstone.



Figure 32: Illawarra Road Bridge (Source: Google maps)

Assessment of significance

The following statement of heritage significance has been extracted from the SHR listing:

The railway station at Marrickville is significant as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The highly intact main platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards, while the booking office on Platform 2 reflects a later period of expansion in the first quarter of the 20th century. Marrickville Railway Station is significant at a State level as the platform building demonstrates the high level of aesthetic design of the pre-1900 standard buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. The platform building is intact and is representative of a small group of such ornate platform buildings including Canterbury and Belmore on the Bankstown Line. The platform building on platform 2 provides an interesting contrast, demonstrating the simpler design of the standard platform buildings of the 1910/20s. Also of significance is the intactness of the weatherboard booking office which is unusual for being one of the few examples of a booking office located on a platform with street entry only and no access from the footbridge or overbridge, though the structure itself is representative of a standard design.²⁹

The following description and assessment of the Illawarra Bridge has been derived from the *Sydney Metro and Southwest – Marrickville Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*.³⁰ The Illawarra Road Bridge is in good condition and is of high significance. The bridge has undergone minor

²⁸ Heritage NSW, 2024. "Marrickville Railway Station Group". *SHI database no. 5012096*, accessed online at: <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012096>.

²⁹ Heritage NSW, 2024. "Marrickville Railway Station Group". *SHI database no. 5012096*.

³⁰ Artefact, 2020. *Sydney Metro City and Southwest – Marrickville Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*. Report to Metron T2M.

alterations, with the original access stairs from the overbridge to platform 1 retaining the original steel stringers, but the installation of new concrete treads and steel balustrades. The later stairs to the south were constructed from steel stringer supported on steel columns and precast concrete treads. The heritage impact assessment identified the following significant views at Marrickville Station that relate to the bridge:

- Views from Illawarra Road of masonry parapet of bridge (high)
- Views from Arthur Street looking south and east towards masonry parapet, wing walls and retaining walls of Illawarra Road overbridge (high).

It is noted that while the bridge forms part of the SHR and s170 curtilages of Marrickville Station, it is not included as part of the LEP curtilage of the item.

Planned works

The Illawarra Road Bridge design package includes the implementation of barrier treatments to provide adequate protection to the Sydney Metro corridor. The approximate total required barrier length is 52m. The preferred option is the use of an on-structure concrete bridge barrier at the edge of the traffic lane, and an off-structure steel beam barrier at the edge of the traffic lane. The works would include:

- Sawcut and remove existing asphalt and kerb along the west side of the bridge
- Install TL3 on structure concrete bridge barrier supported on a concrete strip footing
- Install TL3 off structure steel beam barrier, including a TL3 w-beam barrier, TL3 w-beam to three-beam transition barrier, a TL3 three-beam barrier, and a three-beam to concrete barrier connection.
- Relocation of light poles to the top of the concrete barrier.

Bollards are also proposed to be installed on the city (east) of the bridge in front of the station entrance. The installation would consist of 124 rated or unrated bollards. They would be spaced at 1200mm around the front of the station entrance with an offset of 2000mm from the kerb edge.

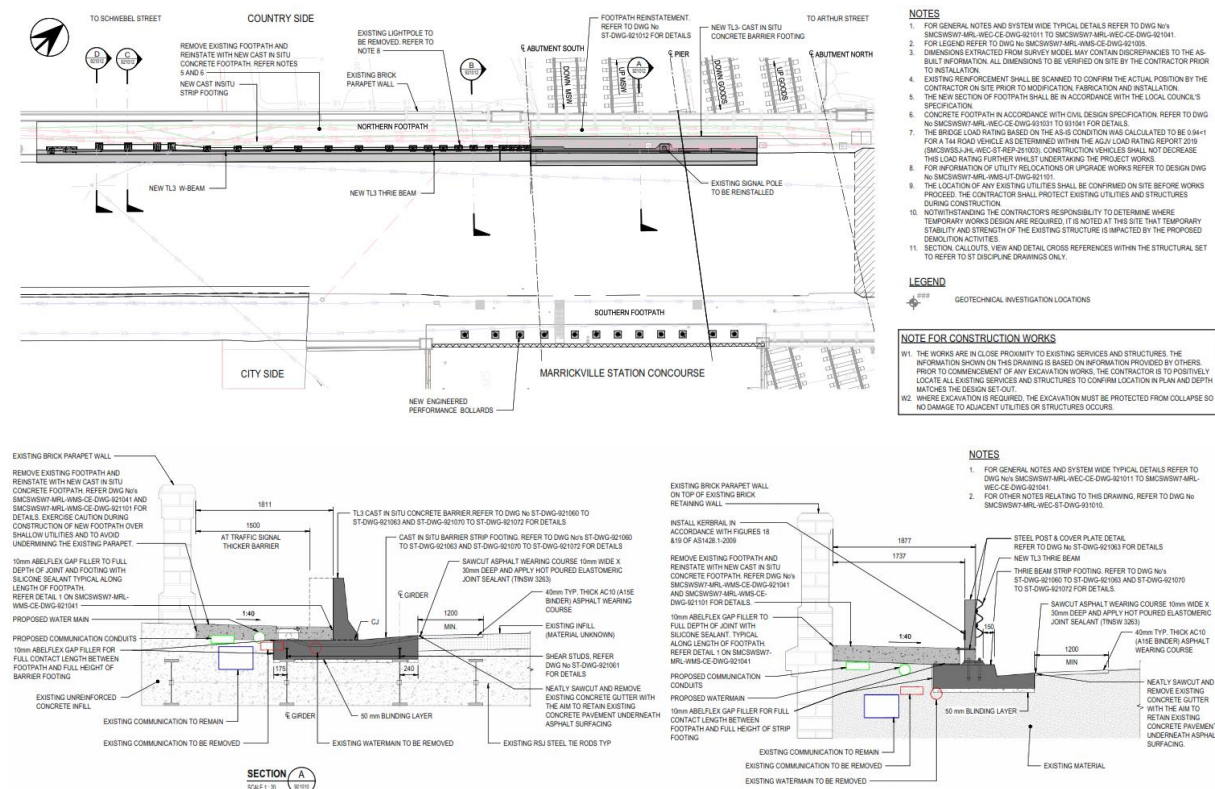


Figure 33: Plan of treatment works for Illawarra Street Bridge (Source: Aurecon 2024, provided by ARCH Artifex)

Archaeological potential

Illawarra Road Bridge is within the Marrickville Station Catchment and is identified in the AARD as an area of moderate to high potential for archaeological remains of local significance and as AMZ 2 (AMS and archaeological investigation). Archaeological remains are likely to consist of remains of the Earlwood Tram Line beneath the extant road surface.

Heritage impacts

Physical:

The proposed works would be undertaken on the bridge, which has been identified as an element of high significance within the station group. However, it is noted that impacts would largely be limited to newer fabric of the bridge. The new barriers and bollards would require impacts to the concrete kerbs, asphalt surfaces, and timber beam light posts, though this fabric contributes less to the significance of the bridge element. These features would be set back from the extant brick parapet wall (by ~~1650~~30-1750mm) and would not impact it. The works would not affect the overall structure or foundations of the bridge. Impacts to significant fabric would primarily occur where the works on the country side of the bridge would remove about 34m of earlier trachyte/sandstone kerbing along the southern side of the heritage item. This would be limited to a relatively small area of the overall station group though, and some sections of earlier kerbing would remain after the works. Overall, it is assessed that the works would cause a **negligible-minor** physical impact to the fabric of the Illawarra Road Bridge, and a **negligible-minor** physical impact to the significance of Marrickville Station. The heritage item would not be materially affected by the works.

Visual:

The treatment works would be located on Illawarra Road Bridge, which is part of the significant views of the station group, namely views from Illawarra Road of the masonry parapet of the bridge, and views from Arthur Street looking towards the masonry parapet, wing walls and retaining walls of Illawarra Road Bridge. These views are considered to be of high significance. The works would install new barriers in close proximity to the brick parapet, as well as bollards in front of the station entrance. However, the brick parapet would be retained and would not be physically impacted by the new barriers. Furthermore, the barriers would be located below the height of the parapet wall. As a result, although the works would introduce visual clutter close to the brick parapet that would cause a visual impact, the significant views of the parapet would be retained. The removal of extant trachyte/sandstone kerbing along the countryside of the bridge would also cause a visual impact. However, this would be limited to a relatively small area of the overall station group, and is located at ground level where it is less visually noticeable. Sections of earlier kerbing would still be present within the station group following the completion of the works. Overall, it is assessed that the works would cause a **minor** visual impact.

Archaeology: Ground disturbing works would be undertaken within the area of moderate to high archaeological potential as identified in the AARD. However, the ground disturbance would be minor in nature, and would primarily be limited to the footpath areas of the bridge rather than being within the extant road surface where archaeological remains associated with the former Earlwood Tram Line would be present. Based on this, it is unlikely that substantial and intact archaeological remains would be encountered by the planned works, and as a result there would be little to no impacts to archaeological remains. Overall, it is assessed that there would be **nil** impacts to significant archaeological remains.

5.2.1.2 South Dulwich Hill Heritage Conservation Area

Heritage item

The Albermarle Street Overbridge is encompassed in the South Dulwich Hill Conservation Area, which is listed as a Heritage Conservation Area (HCA) of local significance on the Inner West LEP 2022 (item no.C107).

Physical description

Albermarle Street Overbridge consists of a concrete road deck atop girders which span between the embankments on either side of the rail corridor. The girders are supported by metal piers. A metal balustrade and safety fence line each side of the road deck. The brick footpath on the eastern side of Albermarle Street is part of the extensive brick paving that was laid in the Great Depression as part of the Employment Relief Schemes in the 1930s.



Figure 34: Albermarle Street Overbridge, with Depression era brick paving visible on the right (east) side (Source: Google Maps)

Assessment of significance

The following statement of heritage significance has been extracted from the LEP listing:

The South Dulwich Hill Heritage Conservation Area is of historical significance as an area developed in the Federation period as a series of c. 1910 subdivisions in the vicinity of the Wardell Road (now Dulwich Hill) Railway Station which opened in 1889. The Area is of aesthetic significance for its many good quality individual examples and small groups of Federation bungalows that retain original timber joinery, window hoods and detailing to gables and verandas to a quality and consistency rare in the Council area. The area includes excellent examples of the Marrickville Iron Palisade fence, particularly in Cannonbury Grove. The area contains a good collection of a locally significant variation of the 'standard' Federation bungalow design with a low ridgeline set parallel to the street alignment. The Area also includes streetscapes of a high quality. This quality is derived from the consistency of subdivision pattern, setbacks, built forms, roof volumes, materials, detailing, and garden spaces. The built forms of the area are representative of the Marrickville area in the early years of the 20th Century as it transformed from a dense urban to detached suburban cultural landscape which includes detached late Federation bungalows and wide lots allowing asymmetrical siting of houses to provide for a side driveway (later development).³¹

The Albermarle Street Overbridge has not been identified as a contributory item in the HCA. It has previously been assessed that the Depression era paving surfaces 'contribute strongly to the textural and aesthetic qualities of the area'.³² As a result the Marrickville DCP 2011 identifies brick paved footpaths associated with the Depression as being one of the core heritage values/elements of the locally significant HCA.

Planned works

Bridge works

The treatment works on Albermarle Street Bridge would include the following:

- Reconstruction of the concrete base slab integrated with an edge beam to facilitate installation of a steel 3 rail barrier on the Albermarle Street Bridge
- Installation of new safety screens to be integrated with the barrier system
- Installation of abutting concrete transition traffic barriers.

³¹ Heritage NSW, 2022. "South Dulwich Hill Conservation Area". *SHI database no. 2030484*, accessed online at: <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2030484>.

³² Paul Davies Pty Ltd Architects Heritage Consultants 2009: 29-32

Non-bridge works

The following non-bridge works are also located within or close to the heritage curtilage:

- CI-008 – Installation of Ezy-guard steel rail barriers
- CI-158 – Installation of concrete barriers
- CI-164 – Installation of Ezy-guard steel rail barriers.

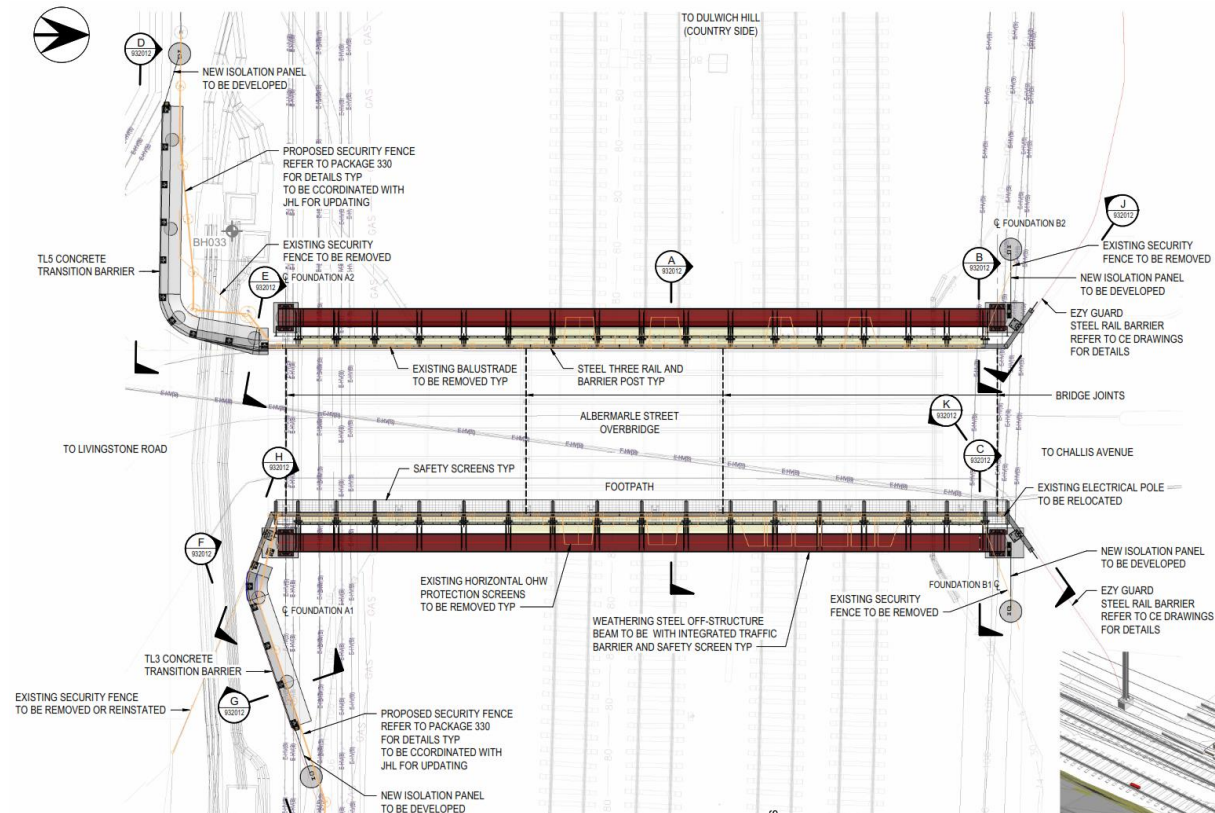


Figure 35: Plan of treatment works for Albermarle Street Bridge (Source: Aurecon 2024, provided by ARCH Artifex)

Archaeological potential

The Albermarle Street Bridge area of the South Dulwich Hill HCA is located within the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential and was identified as Archaeological Management Zone (AMZ) 3 (Unexpected Finds Procedure). No archaeological potential has been identified in association with the bridge deck itself.

Heritage impacts

Physical:

The works would primarily be undertaken on the bridge, which is not identified as a contributory element in the South Dulwich Hill HCA. The works would not affect the overall structure or foundations of the bridge. As a result, the modifications to the bridge itself would cause neutral physical heritage impacts to the South Dulwich Hill HCA. The Depression era brick paving immediately to the south of the bridge on the east side however is considered to be significant fabric. The installation of the concrete transition barriers and steel rail barriers in this location, including the movement of plant and equipment, may impact the brick paving in the process. This may include the need to temporarily remove a portion of the brick paving. However, it is expected that the impacts would be limited to a localised area of paving, which would be minimal in relation to the overall HCA. Overall, it is assessed that the physical impact to the HCA would be **negligible**, and the heritage item would not be materially affected by the works.

Visual:

Although the bridge itself is not considered to be a significant element, the works would involve the installation of anti-throw screens and barriers that would be visible in the localised area, which would cause a visual impact. The Depression era brick paving contributes to the aesthetic qualities of the HCA, therefore removal of part of the paving would also cause a visual impact. However, the impacts would only be visible within a very small portion

of the HCA and would not interrupt significant views of the urban landscape. The overall aesthetic and setting of the HCA would be retained. Overall, it is assessed that the visual impact to the HCA would be **negligible**.

Archaeology: Works would be limited to the Bankstown Line Catchment (AMZ 3), and no archaeological potential has been identified in association with the bridge deck. As a result, it is expected that archaeological impacts would be **nil**.

5.2.1.3 Dulwich Hill Station

Heritage item

Dulwich Hill Railway Station is listed on the following heritage registers as an item of local heritage significance:

- TAHE S170 Register as “Dulwich Hill Railway Station Group” (SHI 4801909)
- Inner West LEP 2022 as “Dulwich Hill Railway Station Group, including interiors” (LEP I1024).

Physical description

The Wardell Road Overbridge consists of a modern, pre-stressed concrete road deck spanning between lateral concrete beams. These beams bear on the original face brick platform and the embankment piers on each side.³³



Figure 36: Wardell Road Overbridge (Source: Google maps)

Assessment of significance

The following statement of significance has been extracted from the TAHE s170 listing:

Dulwich Hill Railway Station has local historical significance as it is one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. While the original 1895 station buildings are no longer extant, the replacement 1935 group of structures including both the overhead booking office and the platform building are significant as they represent typical examples of the Inter-War

³³ Heritage NSW, 2022. “Dulwich Hill Railway Station Group”. *SHI database no. 4801909*, accessed online at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4801909>.

Archaeological potential

Dulwich Hill Station, including Wardell Road Bridge, is part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential and identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The proposed works would be undertaken on the bridge, which has been identified as an element of moderate significance within the station group. However, the works would be limited to areas of the current concrete road deck and footpath, and the non-original fabric of the existing horizontal safety screens. The works would not alter the brick piers and abutments on either side of the rail corridor. The works would not affect the overall structure or foundations of the bridge. Similarly, non-bridge barriers and bollards to be installed would be limited to non-significant footpaths. Overall, it is assessed that the works would cause a **negligible** physical impact to the fabric of the Wardell Road Bridge, and a **negligible** physical impact to the significance of Dulwich Hill Station. The heritage item would not be materially affected by the works.

Visual:

The treatment works would be located on Illawarra Road Bridge, which is part of the significant views of the station group, namely views from the bridge towards the overhead booking office and platform building. New barriers and vertical screens would be installed on the bridge which would introduce new elements to the area. However, the new throw screens would be constructed of glazed panels, significantly retaining the existing view lines from Wardell Road towards the station platform building and overhead booking office. The new throw screens and barriers along Wardell bridge would be consistent with the replacement of existing non-original fabric with a contemporary design that is sympathetic to the existing view lines from the roadway towards the station buildings. Although the height of the throw screens would be partially increased, the proposed materials, siting, and form of these elements helps to mitigate the impact to the visual relationships formed within the station. The new features would not impact the ability to understand the role of the station in the development of Dulwich Hill. Overall, it is assessed that the works would cause a **minor** visual impact.

Archaeology: Ground disturbing activities for the Wardell Road Bridge works and installation of non-bridge rail barriers would be minor in nature and would be limited to areas assessed as having nil to low archaeological potential. Therefore, it is expected that there would be little to no impacts to archaeology. Overall, it is assessed that impacts to significant archaeological remains would be **nil**.

5.2.1.4 Hurlstone Park Station

Heritage item

Hurlstone Park Railway Station is listed on the following heritage registers as an item of local heritage significance:

- TAHE s170 Heritage Inventory Register as "Hurlstone Park Railway Station Group" (SHI 4802051)
- Canterbury Bankstown LEP 2023 as "Victorian and Federation Railway station buildings" (LEP I175).

Physical description

The Hurlstone Park overbridge consists of steel girders supported on face brick embankments and central brick piers, and modern balustrading.³⁶

³⁶ Heritage NSW, 2022. "Hurlstone Park Railway Station Group". *SHI database no. 4802051*, accessed online at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4802051>.



Figure 38: Duntroon Street Bridge (Source: Google Maps)

Assessment of significance

The following statement of heritage significance has been extracted from the TAHE s170 listing:

Hurlstone Park Railway Station has local historical significance as it is one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The platform buildings, footbridge and stairs are significant as examples of the designs used by NSW Railways during the period 1910 to 1920. The wayside platform buildings are good examples of their type, being relatively intact, with the original 1915 men's toilet on Platform 2, although long disused, still retaining its original configuration.³⁷

The Duntroon Street bridge is excluded from the s170 and LEP listing as the bridge has undergone upgrades which has resulted in the general loss of integrity.³⁸ It is noted though that the *Sydney Metro City and Southwest – Hurlstone Park Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment* identified that the adjacent footbridge and deck were of moderate and low significance respectively, and the face brick abutments that support the overbridge are considered to be elements of high heritage significance.³⁹ The Heritage Impact Assessment did not include the road deck of the bridge as part of this element, however, it did identify views of the platform station from the Duntroon Street overbridge as a view line of high significance at the station.

Planned works

The treatment works on Duntroon Street Bridge at Hurlstone Park Station would include the following:

- Removal of the existing buried concrete slab, balustrade, northern end of brick parapet wall, and concrete infill of the bridge
- Removal of existing horizontal safety screens
- Installation of traffic barriers and cast-in-situ concrete slabs
- Installation of new TL4 concrete barriers on the city (east) side of the bridge, ~~which would be faced with a brick fascia~~
- Installation of new glazed vertical protection screens. The new protection screens and rail traffic barrier would be supported by a new off-structure box girder beam
- Installation of new bollards to country side of the bridge.

³⁷ Heritage NSW, 2022. "Hurlstone Park Railway Station Group". *SHI database no. 4802051*.

³⁸ Heritage NSW, 2022. "Hurlstone Park Railway Station Group". *SHI database no. 4802051*.

³⁹ Artefact, 2020. *Sydney Metro City and Southwest – Hurlstone Park Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*. Report to Metron T2M.

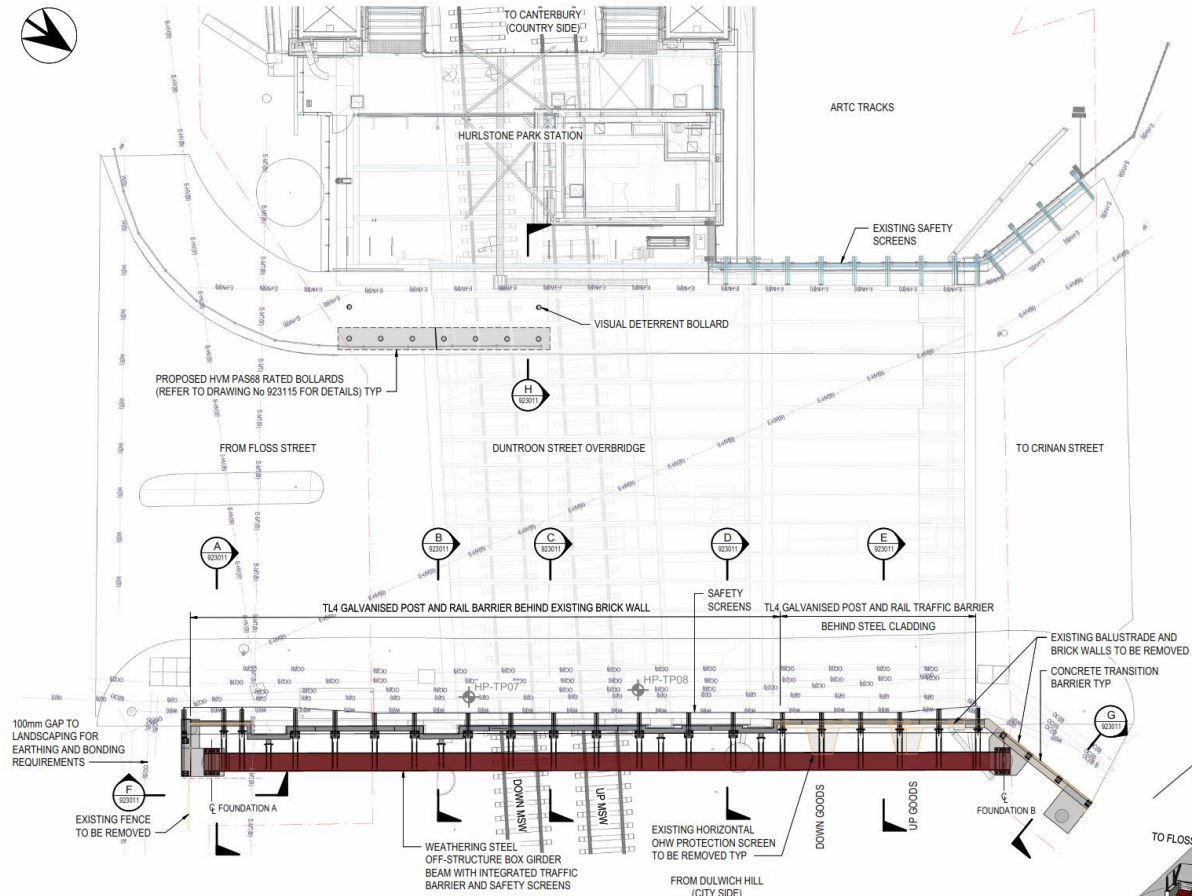


Figure 39: Plan of treatment works for Duntroon Street Bridge (Source: Metron T2M 2022/Aurecon 2024, provided by ARCH Artifex)

Archaeological potential

Hurlston Park Station, including Duntroon Street Bridge, is part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential and identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The works would involve the removal of the northern section of the brick parapet wall on Duntroon Street Bridge, as well as the removal of the existing buried concrete slab and penetrations for the installation of the new vertical screen-off-structure box girder beam and the concrete barriers. However, these are not considered to be contributory elements to the station group. The works would not impact the face brick abutments that support the bridge, and they would not impact the adjacent footbridge or overhead booking office. As a result, no significant fabric would be modified as part of the treatment works. Overall, it is assessed that the works would cause a **neutral** physical impact to the significance of Hurlstone Park Station and the heritage item would not be materially affected by the works.

Visual:

The new throw screens, off-structure box girder beam, barriers and bollards would be installed on the Duntroon Street Bridge which is situated at the entrance to Hurlstone Park Station. This would introduce new material within a visible area, with the throw screens being taller than the existing horizontal safety screens. However, the new features would be largely replacing elements that also do not contribute to the significant setting of the station, with no modifications to the adjacent significant elements. Although the throw screens would be more visible from the platforms, the significant views of the platform buildings from Duntroon Street would be retained and the general setting of the station would not be interrupted. The new off-structure box girder beam and part of the rail barrier would be located on the opposite side of the bridge to the station which would help obscure them from view. The northern section of the existing brick parapet wall would be removed, however, the majority of the parapet wall would be retained. Facing the new concrete traffic barrier along the city side of the bridge with a brick

fascia would allow the barrier to blend in more with the current setting on Duntroon Street. Overall, it is assessed that the works would cause a **negligible** visual impact.

Archaeology: Ground disturbing activities for the Duntroon Street Bridge works would be minor in nature and would be limited to areas assessed as having nil to low archaeological potential. Therefore, it is expected that there would be little to no impacts to archaeology. Overall, it is assessed that impacts to significant archaeological remains would be **nil**.

5.2.1.5 Canterbury Station

Heritage item

Canterbury Railway Station is listed on the following heritage registers as an item of State heritage significance:

- SHR as “Canterbury Railway Station Group” (SHR 01109)
- TAHE s170 Register as “Canterbury Railway Station Group” (SHI 4801100)
- Canterbury Bankstown LEP 2023 as “Canterbury Station Group” (LEP I90).

Physical description

The Canterbury Road Bridge consists of a jack arched brick and concrete deck support by steel girders. The girders are supported by concrete and brick abutments and span the Up and Down Line. The parapet walls lining the road deck are brick.



Figure 40: Canterbury Road Bridge (Source: Google maps)

Assessment of significance

The following statement of heritage significance has been extracted from the SHR listing:

Canterbury Railway Station possesses historical significance as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The main platform building represents the period of

transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards.

Canterbury Railway Station is significant at the state level as the Platform 1 Building demonstrates the high level of aesthetic design of the pre-1900 standard railway buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. This platform building is relatively intact and is representative of a small group of such ornate platform buildings including Marrickville and Belmore on the Bankstown Line.

The Canterbury signal box is of historical significance as it is representative of the development of railway signalling technology in the first decades of the 20th century. As it was is intact internally it is capable of providing information about the workings of a signal box of this era.⁴⁰

The Canterbury Road Bridge is included as part of the above heritage listings. The *Sydney Metro City and Southwest – Canterbury Metro Station Detailed (Revised stage 3) Design Heritage Impact Assessment* assessed the overbridge as being in good condition and as an element of high significance within the station group.⁴¹

The heritage impact assessment identified the following significant views at Canterbury Station that relate to the bridge:

- Views from platform 2 towards exposed sandstone adjacent to brick masonry retaining wall against Canterbury Road (high significance)
- Views from Canterbury Road towards the Signal box (high significance).

Planned works

The treatment works on Canterbury Road Bridge at Canterbury Station would include the following:

- Removal of existing brick parapet walls on the city (east) and country (west) sides of the bridge
- Installation of new TL4 concrete barriers with salvaged brick fascia on the road side
- Demolition, replacement and regrading of existing concrete footpath
- Blast clean and repair the top flange of the bridge girders and weld shear studs to the flange
- Demolition of existing footpath canopy roof and columns
- Installation of new protection screens
- Installation of new security fencing
- Piling and the construction of piling caps
- Installation of new utilities which may be fixed to the brickwork of the bridge.

⁴⁰ Heritage NSW, 2024. "Canterbury Railway Station Group". *SHI database no. 5011966*, accessed online at: <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5011966>.

⁴¹ Artefact, 2020. *Sydney Metro City and Southwest – Canterbury Hill Metro Station Detailed (Revised stage 3) Design Heritage Impact and Consistency Assessment*. Report to Metron T2M.

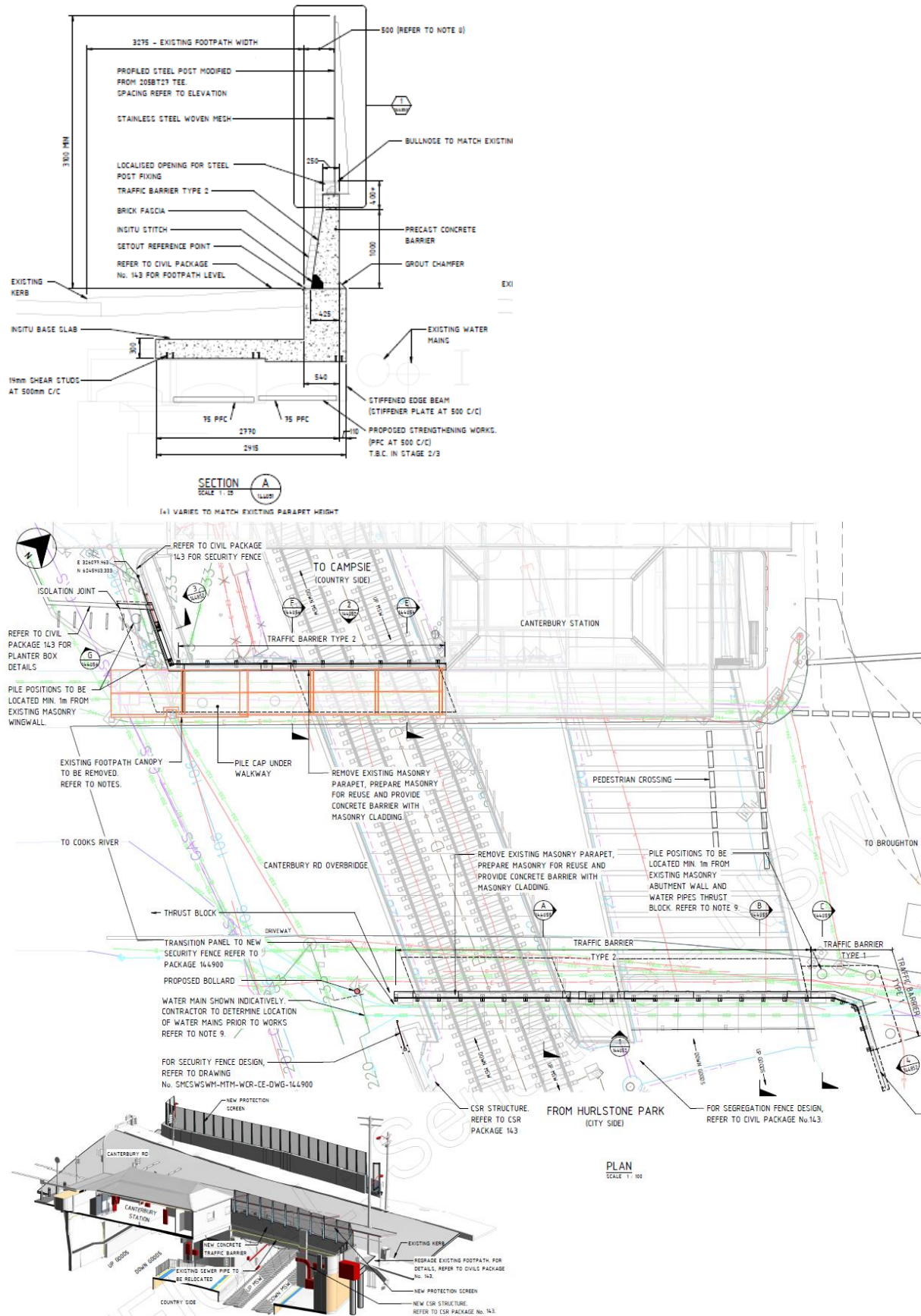


Figure 41: Plans of treatment works for Canterbury Road Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)

Archaeological potential

Canterbury Road Bridge is within the Canterbury Station Catchment and was identified in the AARD as an area of nil to low potential for archaeological remains that are unlikely to reach the threshold of local significance, and identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The main impact from the Canterbury Road Bridge treatment works would be caused by the removal of the existing brick parapet walls along the city and country sides of the bridge. The parapet walls are considered to be elements of high heritage significance, and a contributing element within the SHR listed Canterbury Railway Station. The removal of original significant parapet fabric along each side of the Canterbury Road would be considered a physical impact on heritage fabric. Although it is proposed that bricks of the parapet wall would be salvaged to reuse for the fascia of the new concrete barrier, there would be a reduced number of bricks present, and if the salvage rate is not high enough then it might not be possible to complete the fascia using only salvaged bricks. The removal of this would result in a **moderate** physical impact to the parapet brickwork and bridge element overall.

The steel girders, supporting the parapet, would be inspected, cleaned, and shear studs would be welded to the top flange. The steel girders are considered elements of high heritage significance as original elements of the bridge and a contributing element within the SHR listed Canterbury Railway Station. The cleaning and protective works are considered necessary maintenance and are unlikely to cause physical damage to these structures. As such, these works would result in a **negligible** physical impact to the bridge element.

The works would include the removal of the existing footpath canopy along the northbound Canterbury Road footpath, south of the Canterbury Station building. The canopy, constructed in the late 1980s, is not considered an element of heritage significance within the Canterbury Road Bridge, nor is it a contributing element within the SHR listed Canterbury Railway Station. As such, the removal of the canopy would be considered a **negligible** physical impact to the bridge element.

The installation of utilities on Canterbury Road Bridge, such as sewer pipes, may require that the services be fixed to the existing masonry walls along the bridge and rail corridor. These are considered to be part of the element of high significance and would cause a physical impact to heritage fabric at the attachment points. It is expected though that any penetration points would be small in size and would not impact the surrounding brickwork. As such, new penetrations would be considered a **negligible** physical impact to the bridge element.

Overall, it is assessed that the works would cause a **moderate** physical impact to the fabric of the Canterbury Road Bridge, and a **moderate** physical impact to the SHR listed Canterbury Station. However, as material from the brick parapet walls would be salvaged and reused, it is considered that the impacts to Canterbury Station would not exceed the material threshold.

Visual:

The main visual impact from the Canterbury Road Bridge treatment works would again be caused by the removal of the existing brick parapet walls. The parapet walls would be replaced by new concrete barriers which would run at the base of the Canterbury Road-level brick parapets and would be a visible element within Canterbury Station, particularly from the surrounding streetscape. These would be feature a brick fascia comprised of salvaged bricks from the parapet walls, which would help the new concrete barriers blend in with the existing setting. However, it is possible that a sufficient number of bricks cannot be salvaged in suitable condition to allow the full cladding of the concrete barrier with original brickwork, and that new brick might be required for fascia. Reinstated brickwork which is attached to the exterior of the concrete barriers are considered difficult to restore with the original bond, angling and patterning of the existing parapet walls. As such, it is considered likely that even with the brick fascia on the concrete barriers the setting of Canterbury Road Bridge would be significantly altered in appearance from its current original state.

Further visual impacts would occur as a result of the installation of new protection screens, which would extend above the height of the concrete barriers, the construction of the piling cap structure, and where new utilities are installed. These would be visible within public areas. Although not a significant element, the demolition of the existing footpath canopy roof would also alter the current visual setting of the Canterbury Road Bridge to a lesser degree. Although the significant views identified for the station would be retained, the combination of works would adversely impact the current station setting.

Overall, it is assessed that the works would cause a **moderate** visual impact.

Archaeology: Ground disturbing activities for the Canterbury Road Bridge works would be minor in nature and would be limited to areas assessed as having nil to low archaeological potential. Therefore, it is expected that there would be little to no impacts to archaeology. Overall, it is assessed that impacts to significant archaeological remains would be **nil**.

5.2.1.6 Belmore Station

Heritage item

Belmore Railway Station is listed on the following heritage registers as an item of State heritage significance:

- SHR as “Belmore Railway Station Group” (SHR 01081)
- TAHE s170 Register as “Belmore Railway Station Group” (SHI 4801084)
- Canterbury Bankstown LEP 2023 as “Federation railway station buildings” (LEP I33).

Physical description

The Burwood Road Bridge consists of a prestressed concrete road deck, support by concrete abutments on either side and a central brick pier which was part of the original overbridge.⁴² The existing barriers between the road and the rail corridor are steel mesh screens fixed to the concrete pavement.



Figure 42: Burwood Road Bridge (Source: Google maps)

Assessment of significance

The following statement of heritage significance has been extracted from the SHR listing:

^{42_42} Heritage NSW, 2024. “Belmore Railway Station Group”. *SHI database no. 5045375*, accessed online at: <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5045375>.

Belmore Station is of State significance as it was the initial terminus station on the Sydenham to Bankstown Line which had been constructed to relieve congestion on the Main South Line as well as to promote agriculture and suburban growth. The platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design of the 1890s onwards and the high level of aesthetic design of pre-1900 standard railway buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. The building is relatively intact and is representative of a small group of such ornate platform buildings including Canterbury and Marrickville on the Bankstown Line.⁴³

The Burwood Road Bridge is ~~included-located within the mapped curtilages as part~~ of the above heritage listings. However, the SHR listing notes that the overbridge is excluded from the property boundary, and states that the bridge is not a significant element. The Sydney Metro City and Southwest – Belmore Metro Station Detailed (Revised stage 3) Design Heritage Impact Assessment assessed the overbridge as being in good condition but as an element of little significance within the station group.⁴⁴

The heritage impact assessment identified the following significant views at Canterbury Station that relate to the bridge:

- Views on Burwood Road towards the overhead booking office (exceptional significance)
- Views from the Redman Parade carpark of the platform 1 building and overhead booking office (moderate significance).

Planned works

Bridge works

The treatment works on Burwood Road Bridge at Belmore Station would include the following:

- Removal of existing balustrade that would be reinstalled
- Removal of existing horizontal safety screens
- Installation of new concrete barriers that tie into existing boundary fences
- Installation of off-structure beam, supported on 600mm diameter piles, with TL4 steel post and three rail barrier
- Installation of new glass and angled mesh safety screens to be integrated with new barriers and off-structure beam
- Installation of 17 new bollards
- Modification of existing footpath and installation of new concrete panels.

Non-bridge works

The following non-bridge works are also located within the heritage curtilage:

- CI-086 – Installation of Ezy-guard steel rail barriers

⁴³ Heritage NSW, 2024. "Belmore Railway Station Group". *SHI database no. 5045375*.

⁴⁴ Artefact, 2020. *Sydney Metro City and Southwest – Belmore Metro Station Detailed (Revised stage 3) Design Heritage Impact and Consistency Assessment*. Report to Metron T2M.

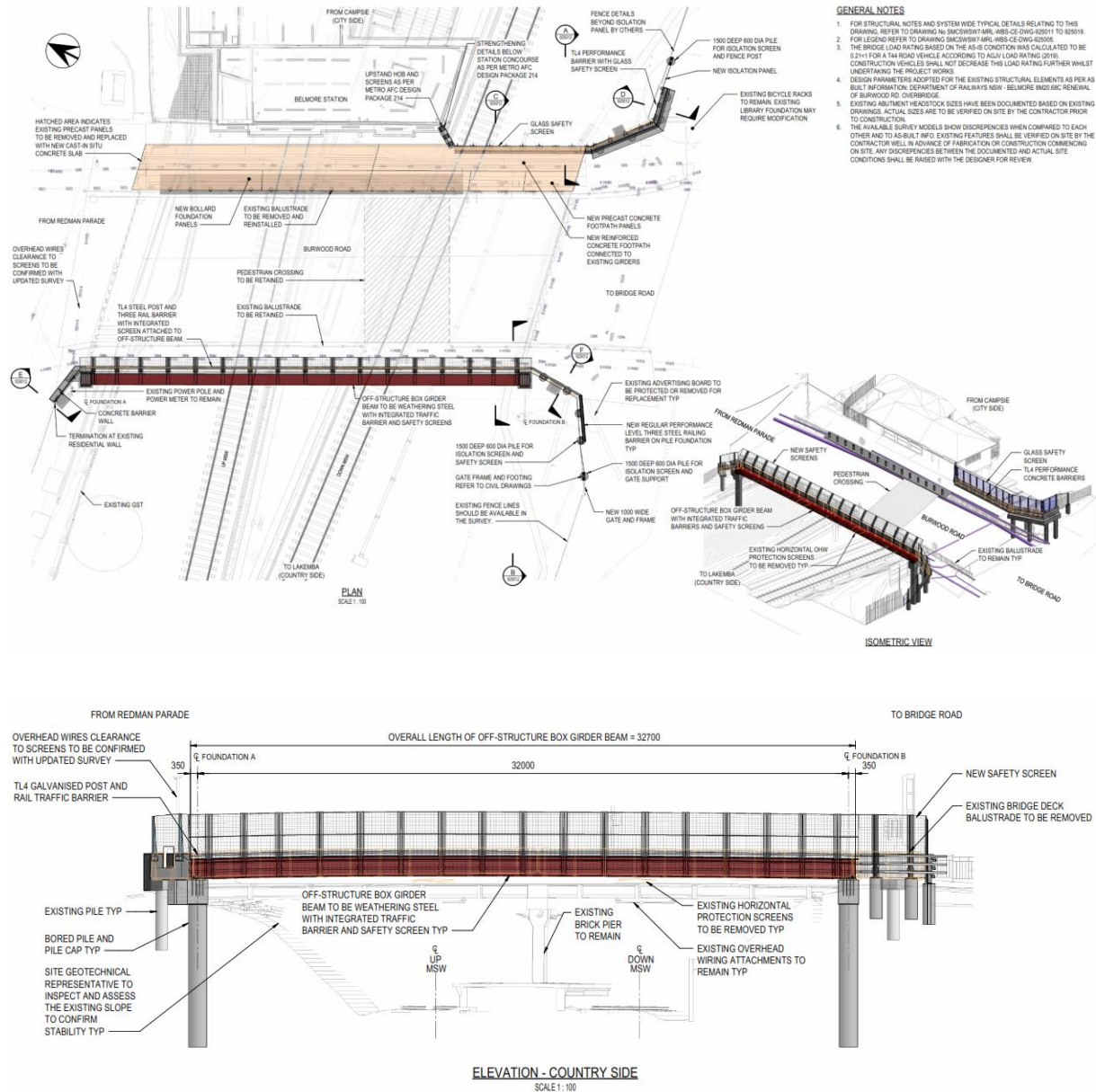


Figure 43: Plans of treatment works for Burwood Road Bridge (Source: Aurecon 2024, provided by ARCH Artifex)

Archaeological potential

Burwood Road Bridge is within the Belmore Station Catchment and is mapped in the AARD as part of an area of low to moderate potential for archaeological remains that would potentially meet the threshold for local significance, and as part of the area identified as AMZ 2 (AMS and archaeological investigation). Those areas of archaeological potential are associated with Phase 2 (1880-1920); however, the archaeological potential is primarily associated with the rail corridor rather than Belmore Road Bridge. The AARD notes that there is moderate potential for post 1930 archaeological remains associated with utilities and drainage which were assessed as not meeting the threshold for local significance. The location of CI-086 is outside of the rail corridor in an area assessed as having nil to low archaeological potential that was identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The proposed works would be undertaken on Burwood Road Bridge, which is ~~excluded from within~~ the heritage curtilages of Belmore Station ~~and. However, the bridge~~ has been identified as an element of little ~~to no~~

significance within the station group. As a result, the removal of the existing horizontal safety screens, the modifications to the concrete footpath, and the installation of new barriers and bollards along the concrete bridge deck and pavement would ~~not impact any significant elements~~~~cause negligible impacts~~. The works would not affect the overall structure or foundations of the bridge, and piles to support the off-structure beam would be limited to the non-significant rail embankment. Similarly, the non-bridge barriers and safety screens to be installed ~~along the edge of the station curtilage~~ would not be attached to any significant fabric or structures, such as the adjacent overhead booking office. Overall, it is assessed that the works would cause a **negligible** physical impact to the fabric of the Burwood Road Bridge, and ~~a negligible-neutral~~ physical impact to the significance of Belmore Station. The heritage item would not be materially affected by the works.

Visual:

The new throw screens, barriers and bollards would be installed on the Burwood Road Bridge which is situated at the entrance to Belmore Station. This would introduce new material within a visible area, with the throw screens being taller than the existing horizontal safety screens. However, the bridge is not considered to be part of the station listings and is of little to no significance, and the new features would be replacing elements that also do not contribute to the significant setting of the station, with no modifications to the adjacent significant elements. Although the throw screens would be more visible from the platforms, the significant views on Burwood Road towards the overhead booking office (exceptional significance) would be retained and the general setting of the station would not be interrupted. Similarly, the installation of new barriers on the edge of the Redman Parade carpark would be replacing existing non-significant fencing and would not interrupt views of the platform 1 station building and overhead booking office (moderate significance). Overall, it is assessed that the works would cause a **negligible** visual impact.

Archaeology: Although the works on Burwood Road Bridge would be located within an area mapped in the AARD as having low to moderate archaeological potential (AMZ 2), as noted above this potential is primarily associated with the rail corridor underneath the bridge. Archaeological potential associated with the road deck of the bridge itself is likely to be limited to non-significant services and utilities. Excavations for the bridge works in the rail corridor would generally be limited to the piling close to the base of the bridge. However, this is an area that typically features a higher level of previous ground disturbance associated with the bridge construction and utility installations. Therefore, it is unlikely that significant archaeology would be present in the localised positions of the piles. In addition, ground disturbance for the installation of rail barriers at CI-086 would be limited to an area of nil to low potential (AMZ 3). Therefore, considering the minor nature of the ground disturbing activities it is unlikely that substantial archaeological remains would be encountered by the works, and as a result there would be little to no impacts to archaeological remains. Overall, it is assessed that there would be **nil** impacts to significant archaeological remains.

5.2.1.7 Lakemba Station

Heritage item

Lakemba Railway Station is listed on the following heritage registers as an item of local heritage significance:

- TAHE s170 Register as “Lakemba Railway Station Group” (SHI 4801916)
- Canterbury-Bankstown LEP 2023 as “Federation railway station buildings” (LEP I208).

Physical description

Haldon Street overbridge is a two span concrete girder structure, stretching approximately 27m.



Figure 44: Haldon Street Bridge (Source: Google maps)

Assessment of significance

The following statement of heritage significance has been extracted from the TAHE s170 listing:

Lakemba Railway Station has local historical significance as it was one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The station reflects the extension of the line to Bankstown in 1909 and the platform building, and associated stairs reflect the development of suburbs in the area after World War I. The platform building and stairs are also significant as examples of the design and technology of these structures built by NSW Railways between 1910 and the 1950s.⁴⁵

The Haldon Street Bridge is not within the curtilage of the s170 listings. It is located partially within the LEP curtilage of the heritage item, however, the LEP listing does not include the bridge as part of its description of the station group. The bridge is not identified as a significant element in the *Sydney Metro City and Southwest – Lakemba Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*.⁴⁶ The heritage impact assessment did however identify the following significant views at Lakemba Station that relate to the bridge:

⁴⁵ Heritage NSW, 2022. “Lakemba Railway Station Group”. *SHI database no. 4801916*, accessed online at: <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4801916>.

⁴⁶ Artefact, 2020. *Sydney Metro City and Southwest – Lakemba Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*. Report to Metron T2M.

- Views from the Haldon Street overbridge looking west towards the city-end of the station island platform (high significance)
- Views from Railway Parade, in the vicinity of the intersection of Croydon Street, which allow clear south-facing views of the island platform and platform station building (high significance)
- Views from Railway Parade of public gardens between the pedestrian concourse and Haldon Street to the north of the rail corridor (high significance)
- Views from the Boulevard of public gardens and war memorial between the pedestrian concourse and Haldon Street to the south of the rail corridor (high significance).

Planned works

Bridge works

The treatment works on Haldon Street Bridge at Lakemba Station would include the following:

- Removal of existing horizontal safety screens/fencing on both sides of the bridge
- Installation of new TL4 post and rail barriers with concrete barrier to kerb and gutter transitions
- ~~Installation of new vertical protection screens with glazing, to be integrated with new barriers~~
- Modification of existing concrete footpath associated with barrier installation work
- Installation of new bollards to station entrances.

Non-bridge works

The following non-bridge works are also located within or close to the heritage curtilage:

- CI-103 – Installation of Ezy-guard steel rail barriers
- CI-106 – Installation of concrete barriers.

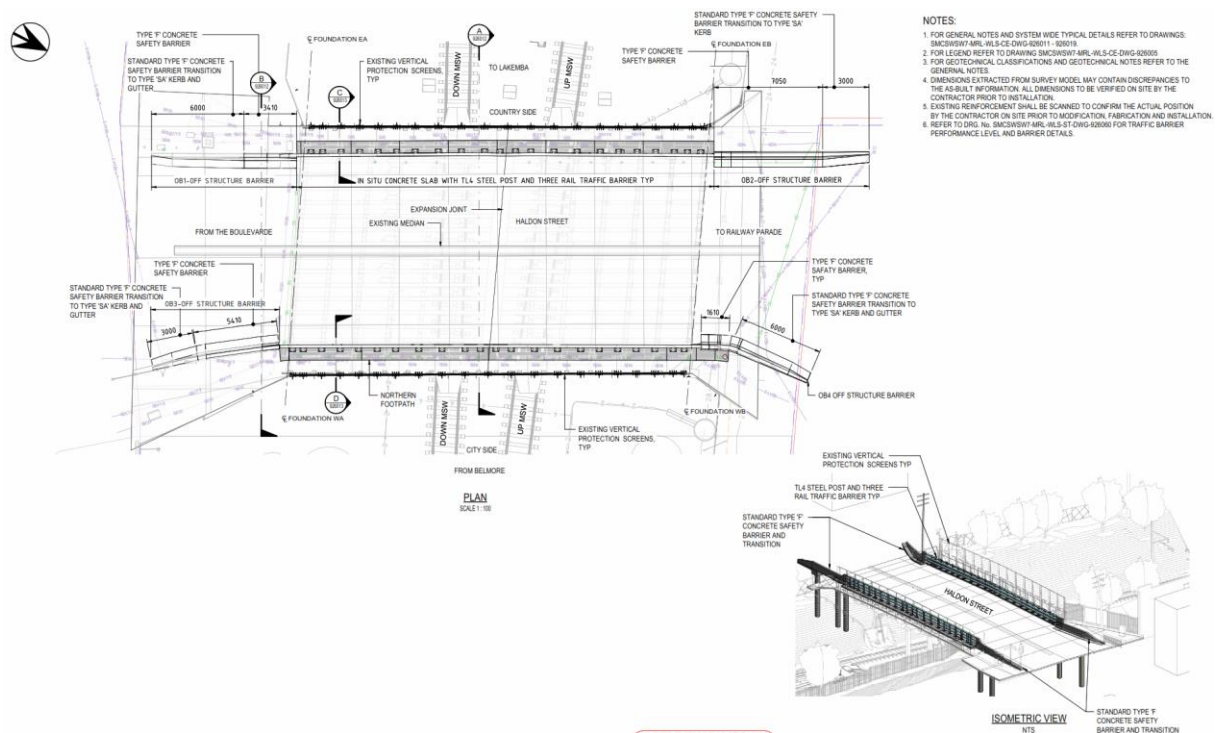


Figure 45: Plan of treatment works for Haldon Street Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)

Archaeological potential

Haldon Street Bridge and CI-106 and CI-103 are within the Lakemba Station Catchment. CI-106 is located within an area assessed as having low to moderate potential for archaeological remains of local significance, CI-103 is located within an area assessed as having low potential for archaeological remains of local significance, and the area of Haldon Street Bridge is assessed as having nil to low potential to contain archaeology that is unlikely to reach the threshold for local significance. CI-106 is within an area identified as AMZ 2 (AMS and archaeological investigation), while Haldon Street Bridge and CI-103 are both located within an area identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The works on Haldon Street Bridge would involve the removal of existing ~~horizontal safety screens~~fencing on both sides of the bridge and the modification of the adjacent concrete footpath. However, the bridge and its associated components are not considered to be part of the station group. As a result, the removal of the existing ~~safety screens~~fencing, the modifications to the concrete footpath, and the installation of new barriers along the concrete bridge deck and pavement would not cause any physical impacts to significant fabric. Similarly, the new non-bridge rail barriers and bollards that would be installed within and/or near the curtilage of the station group would be located along the edges of grassed embankments or modern concrete footpaths and would not impact any significant fabric. Overall, it is assessed that the works would cause a **neutral** long-term physical impact to the significance of Lakemba Station and the heritage item would not be materially affected by the works.

Visual:

The new ~~safety screens and~~ concrete and steel rail barriers would be installed on Haldon Street Bridge which is visible from the station. This would introduce new material within a visible area, ~~with the safety screens being taller than the existing horizontal safety screens~~. However, the new features would be replacing installed alongside elements that also do not contribute to the setting of the station, such as existing vertical safety screens which are more visually noticeable. Although the new elements ~~safety screens~~ would be ~~more~~ visible from the platforms, the significant views to and from Haldon Street, the station, and the surrounding streetscape such as Railway Parade would be retained, and the general setting of the station would not be interrupted. Non-bridge rail barriers would be limited to the northern edge of the station group and outside the heritage curtilage to the east, typically in locations where existing fences are present. As a result, these would generally also be consistent with the existing station setting and would have minimal impacts on streetscape views. New bollards to the station entrances are minor in scale and would not be visible in any significant views. Overall, it is assessed that the works would cause a **negligible** visual impact.

Archaeology: Works for Haldon Street Bridge and at CI-103 would be limited to areas assessed as having nil to low and low archaeological potential respectively. In addition to having low archaeological potential, the ground disturbing activities for these works would also be limited. Therefore, it is not expected that significant archaeological remains would be impacted. Ground disturbing works for the installation of concrete barriers at CI-106 would be located within an area of low to moderate archaeological potential. However, the barriers would be located at the top of the rail embankment, and a review of the AARD and historical plans has not identified the presence of any historical structures in this location. Therefore, given the minor nature of ground disturbance required for the installation, it is unlikely that substantial and intact archaeology would be encountered and there would be little to no impacts. Overall, it is assessed that there would be **nil** impacts to significant archaeological remains.

5.2.1.8 Punchbowl Station

Heritage item

Punchbowl Railway Station is listed on the following heritage registers as an item of local heritage significance:

- TAHE s170 Register as “Punchbowl Railway Station Group” (SHI 4802009)
- Canterbury Bankstown LEP 2023 as “Federation railway station building” (LEP I226).

Physical description

Punchbowl Road overbridge, constructed in 1979, is a two span concrete girder bridge spanning approximately 48 metres.⁴⁷



Figure 46: Punchbowl Road Bridge (Source: Google Maps)

Assessment of significance

The following statement of heritage significance has been extracted from the s170 listing:

Punchbowl Railway Station has local historical significance as it was one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The station reflects the extension of the line to Bankstown in 1909 and the overhead booking office, footbridge and stairs, reflect the development of suburbs in the area during the Interwar period.⁴⁸

The Punchbowl Road Bridge is located within the mapped s170 curtilage of Punchbowl Station and partially within the LEP curtilage. However, it is noted that the bridge is excluded from~~not included as part of~~ the above

⁴⁷ AECOM, 2017. *Sydney Metro City and Southwest Sydenham to Bankstown Upgrade – Technical Paper 1 – Traffic, Transport and Access*. Accessed online at: <https://www.sydneymetro.info/sites/default/files/document-library/Sydenham%20to%20Bankstown%20Environmental%20Impact%20Statement%20Volume%202%20Traffic%20Part%204%20Report.pdf>.

⁴⁸ Heritage NSW, 2022. “Punchbowl Railway Station Group”. *SHI database no. 4802009*, accessed online at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4802009>.

heritage listings.⁴⁹ The *Sydney Metro City and Southwest – Punchbowl Metro Station Detailed (Revised stage 3) Design Heritage Impact Assessment* did not identify Punchbowl Road Overbridge as being a significant element within the station group.⁵⁰ However, it did identify the following significant views at Punchbowl Station that relate to the bridge:

- Views from Punchbowl Road to platform stairways and existing overhead booking office, which are partially obscured by new fabric (moderate significance)
- Views from Punchbowl Road overbridge to the existing overhead booking office which are partially obstructed by new fabric (moderate significance).

Planned works

Bridge works

The treatment works on Punchbowl Road Bridge at Punchbowl Station would include the following:

- Removal of existing horizontal protection screens and traffic barriers
- Installation of new TL4 three rail steel traffic barriers atop reconstructed reinforced concrete upstand, with w-beam transitions and kerb and gutter transitions
- Installation of new vertical protection screens to be integrated with new barriers
- Modification of existing concrete footpath associated with barrier installation work, with reconstructed reinforced concrete upstand
- Installation of new fencing at Warren Park entry
- Installation of new bollards, bicycle hoops, street furniture and landscaping at The Boulevard entry ~~Demolition of existing reinforced concrete retaining wall to be replaced with contiguous bored piles and capping beam.~~

Non-bridge works

The following non-bridge works are also located within or close to the heritage curtilage:

- CI-136 – Installation of concrete barriers
- CI-141 – Installation of concrete barriers.

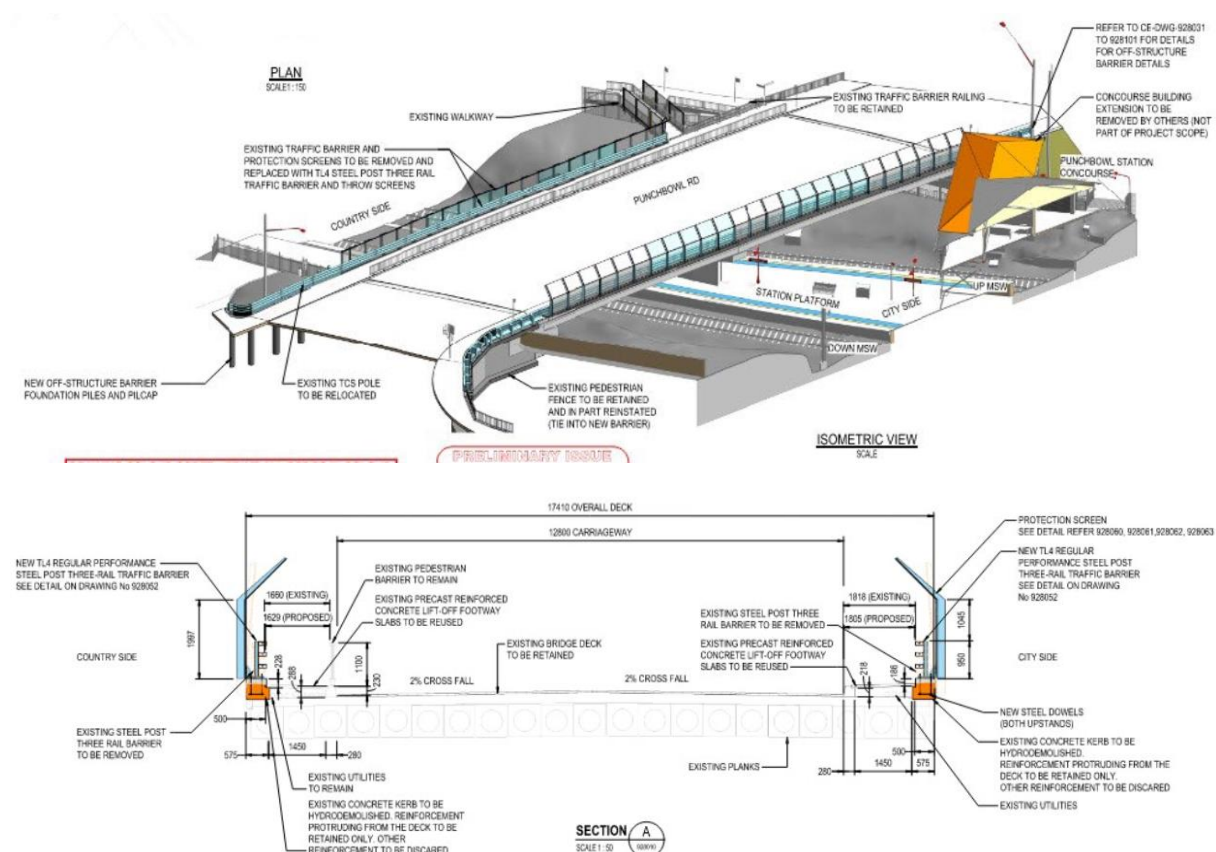


Figure 47: Plan of treatment works for Punchbowl Road Bridge (Source: [Metron T2M 2022 Aurecon 2024](#), provided by ARCH Artifex)

⁴⁹ Heritage NSW, 2022. "Punchbowl Railway Station Group". *SHI database no. 4802009*.

⁵⁰ Artefact, 2020. *Sydney Metro City and Southwest – Punchbowl Metro Station Detailed (Revised stage 3) Design Heritage Impact and Consistency Assessment*. Report to Metron T2M.

Archaeological potential

Punchbowl Station, including Punchbowl Road Bridge, is part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential and identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The works on Punchbowl Road Bridge would involve the removal of existing horizontal safety screens on both sides of the bridge and the modification of the adjacent concrete footpath and retaining walls. However, the bridge and its associated components are not considered to be part of the station group. As a result, the removal of the existing safety screens, the modifications to the concrete footpath and retaining walls, and the installation of new barriers along the concrete bridge deck would not cause any physical impacts to significant fabric. Similarly, the new non-bridge rail barriers, bollards and additional street furniture that would be installed within the curtilage of the station group would be located along the edge of the rail embankment or modern concrete carpark/footpaths and would not impact any significant fabric. Overall, it is assessed that the works would cause a **neutral** long-term physical impact to the significance of Punchbowl Station and the heritage item would not be materially affected by the works.

Visual:

The new safety screens and steel rail barriers would be installed on Punchbowl Road Bridge which is visible from the station. This would introduce new material within a visible area, with the safety screens being taller than the existing horizontal safety screens. However, the new features would be replacing elements that also do not contribute to the setting of the station, and station entrance is located off the bridge. Although the safety screens would be more visible from the platforms, the significant views from Punchbowl Road to the platform stairways and existing overhead booking office would be retained, and the general setting of the station would not be interrupted. Non-bridge rail barriers, bollards, and street furniture, would typically be limited to the southern edges of the station group and outside the heritage curtilage to the northwest, with barriers generally being installed in locations where existing fences are present. These elements would be minor in scale. As a result, these would generally also be consistent with the existing station setting and would have minimal impacts on streetscape views. Overall, it is assessed that the works would cause a **negligible** visual impact.

Archaeology: Ground disturbing activities for the Punchbowl Road Bridge works and installation of non-bridge rail barriers along the edge of the rail corridor would be minor in nature and would be limited to areas assessed as having nil to low archaeological potential. Therefore, it is expected that there would be little to no impacts to archaeology. Overall, it is assessed that impacts to significant archaeological remains would be **nil**.

5.2.1.9 Wiley Park Station

Heritage item

Wiley Park Railway Station is listed on the following heritage registers as an item of local heritage significance:

- TAHE s170 Register as “Wiley Park Railway Station Group” (SHI 4801946)
- Canterbury Bankstown LEP 2023 as “Interwar railway station building” (LEP I236).

Physical description

The King Georges overbridge is a three span concrete girder structure spanning approximately 31 metres.⁵¹



Figure 48: King Georges Road Bridge (Source: Google Maps)

Assessment of significance

The following statement of heritage significance has been extracted from the s170 listing:

Wiley Park Railway Station is historically significant at a local level as it was the last of the stations erected on the Sydenham to Bankstown Line which had been built to relieve congestion on the Main Southern Line and to promote agriculture and suburban development in the late 19th and early 20th centuries. The brick platform building and overhead booking office reflect the need to service the growing population in the area in the 1930s. The station is significant as unlike other stations in the Metro network it was a station which was not financed and constructed by the State Government, but by the Local Council. While the overall integrity of the complex has been compromised by alterations and additions the overhead booking office and brick waiting room on platform 2 have a moderate level of integrity and are representative of the Inter-War Railway Domestic style utilised by NSW Railways at the time.⁵²

The 1974 King George Street Bridge is not within the curtilage of the above heritage listings. The bridge is not identified as a significant element in the *Sydney Metro City and Southwest – Wiley Park Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*.⁵³ The heritage impact assessment did however identify views from King Georges Road at the entrance to the overhead booking office as one of the significant view lines at the station (moderate significance).

⁵¹ AECOM, 2017.

⁵² Heritage NSW, 2022. “Wiley Park Railway Station Group”. *SHI database no. 4801946*, accessed online at <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=4801946>.

⁵³ Artefact, 2020. *Sydney Metro City and Southwest – Wiley Park Metro Station Detail (Revised stage 3) Design Heritage Impact Assessment*. Report to Metron T2M.

Planned works

Bridge works

The treatment works on King Georges Street Bridge at Wiley Park Station would include the following:

- Removal of the existing precast concrete slabs and footpath slabs
- Removal of existing horizontal safety rails/screens and balustrades
- Installation of new cast insitu concrete barriers and steel post and three rail barriers with sloped ends and termination barriers
- Installation of new safety screens, consisting of a combination of stainless steel woven mesh and plexiglass panels
- Clean and paint existing kerbside balustrade
- Installation of new piles, pile cap, and associated concrete barrier and integrated vertical protection screens
- Installation of 11 new bollards to the station entrance.

Non-bridge works

The following non-bridge works would also be located within or close to the heritage curtilage:

- CI-119 – installation of Ezy-guard steel rail barriers
- CI-120 – installation of Ezy-guard steel rail barriers
- CI-121 – installation of Ezy-guard steel rail barriers.

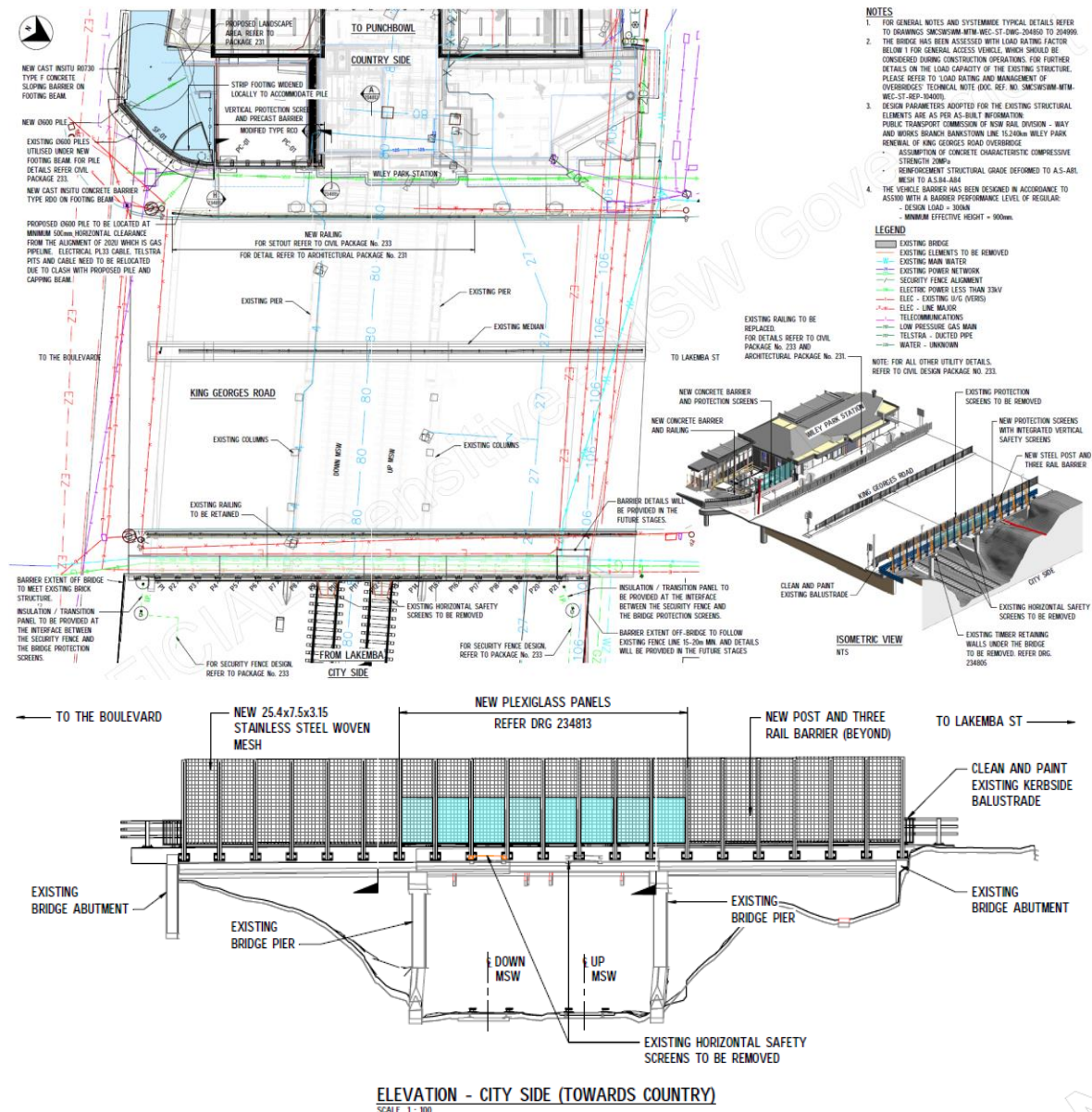


Figure 49: Plans of treatment works for King Georges Road Bridge (Source: Metron T2M 2022, provided by ARCH Artifex)

Archaeological potential

Wiley Park Station, including King Georges Road Bridge, is part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential and identified as AMZ 3 (Unexpected Finds Procedure).

Heritage impacts

Physical:

The works on King Georges Road Bridge would involve the removal of existing concrete slabs, safety rails/screens, and balustrades. However, the bridge and its associated components are not considered to be part of the station group. The works would not impact the adjacent footbridge, which is an element of moderate significance. As a result, no significant fabric would be modified as part of the bridge treatment works. Similarly, the new non-bridge rail barriers and bollards that would be installed within the curtilage of the station group would be located along the edges of grassed embankments or modern concrete footpaths. It is not expected that these would cause any long-term impacts to the landscape/natural features associated with the station group, which are considered to be elements of high significance. Overall, it is assessed that the works would cause a **neutral** long-term physical impact to the significance of Wiley Park Station and the heritage item would not be materially affected by the works.

Visual:

The new safety screens and concrete and steel rail barriers would be installed on the King Georges Road Bridge which is situated at the entrance to Wiley Park Station. This would introduce new material within a visible area, with the safety screens being taller than the existing horizontal safety screens/rails. However, the new features would be replacing elements that also do not contribute to the setting of the station, with no modifications to the adjacent significant elements. Although the safety screens would be more visible from the platforms, the significant views from King Georges Road would be retained and the general setting of the station would not be interrupted. This would be helped by the use of sections of glazed protection screens. Non-bridge rail barriers bollards would be limited to the edges of the station group, with the barriers typically in locations where existing fences are present. As a result, these would generally also be consistent with the existing station setting and would not detract from the landscape/natural features. Overall, it is assessed that the works would cause a **negligible** visual impact.

Archaeology: Ground disturbing activities for the King Georges Road Bridge works and installation of non-bridge rail barriers along the edge of the rail corridor would be minor in nature and would be limited to areas assessed as having nil to low archaeological potential. Therefore, it is expected that there would be little to no impacts to archaeology. Overall, it is assessed that impacts to significant archaeological remains would be **nil**.

5.2.2 Remaining works near heritage items

Concise impact assessments for the remaining heritage items that would not be directly modified by the planned works are provided in Table 11.

Table 11: Assessment of impacts to heritage items near work locations

Heritage item	Relevant work locations	Impacts
Inter-War Group Heritage Conservation Area—Hollands Avenue; Jocelyn Avenue and Woodbury Street	Livingstone Rd Bridge	Physical: Neutral . Works would be located outside of the heritage item.
		Visual: Neutral . The works on Livingstone Road Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
Turpentine - Ironbark Forest Understory	CI-019 Wardell Rd Bridge	Physical: Neutral . The new rail barrier would be located in the same location as the existing fencing. The existing vegetation associated with the heritage item would not need to be removed to facilitate the installation. The vegetation also would not be impacted by the adjacent bridge works on Wardell Road
		Visual: Negligible . The new rail barrier would be installed within the curtilage of the heritage item, which would be taller than the existing fence in this location. However, the significant vegetation present would still be visible, and the installation of rail barriers in the same location of the existing fence would generally be visually consistent with the existing setting. Similarly, the throw screen, bollard, and footpath treatment works on Wardell Road Bridge would not adversely effect the visual setting of the heritage item
		Archaeological: Nil . No potential archaeological remains have been identified in association with the heritage item
Gladstone Hall, including interiors	CI-027	Physical: Neutral . Works would be located outside of the heritage curtilage
		Visual: Neutral . The new rail barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of rail barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
Duntroon Street Heritage Conservation Area	Garnet St Bridge	Physical: Neutral . Works would be located outside of the heritage curtilage
		Visual: Neutral . The works on Garnet Street Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area
		Archaeological: Nil
Crinan Street Shops Heritage	Duntroon St Bridge	Physical: Neutral . Works would be located outside of the heritage curtilage

Heritage item	Relevant work locations	Impacts
Conservation Area		Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the very edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area Archaeological: Nil
Floss Street Heritage Conservation Area	Duntroon St Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the northern edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area Archaeological: Nil
Inter war building - The Chambers	Duntroon St Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The works on Duntroon Street Bridge would only be visible from the northern side of the heritage item. There would be no interruptions to the views to or from the heritage item, and would not adversely affect views between the surrounding conservation area and nearby station Archaeological: Nil
Melford Street Heritage Conservation Area	Melford St Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The works on Melford Street Bridge would only be visible from the southern edge of the conservation area, and would not adversely affect the streetscape setting outside of the heritage curtilage. There would be no interruptions to the views to or from the overall conservation area Archaeological: Nil
Inter-War Hotel (former Hotel Canterbury)	Canterbury Rd Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The works on Canterbury Road Bridge would only be visible from a small portion of the heritage item, and would not interrupt views to or from the heritage item Archaeological: Nil
Federation Post Office Building (former Canterbury Post Office)	Canterbury Rd Bridge	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The works on Canterbury Road Bridge would only be visible from a small portion of the heritage item, and would not interrupt views to or from the heritage item Archaeological: Nil
Federation house	CI-058	Physical: Neutral. Works would be located outside of the heritage curtilage

Heritage item	Relevant work locations	Impacts
		Visual: Neutral. The new rail barrier would not interrupt views towards the heritage item, and due to surrounding vegetation and buildings the barrier would only be visible from the northern edge of the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of rail barriers in the same location would be visually consistent with the existing setting Archaeological: Nil
Federation villa	CI-060	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The new concrete barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor, so the installation of concrete barriers in the same location would be visually consistent with the existing setting Archaeological: Nil
Inter war commercial building - Station House	CI-061	Physical: Neutral. Works would be located outside of the heritage curtilage Visual: Neutral. The new concrete barrier would not interrupt views towards the heritage item. There is an existing fence along the edge of the rail corridor that is partially obscured by vegetation, so the installation of concrete barriers in the same location would be visually consistent with the existing setting Archaeological: Nil
Campsie Station	CI-075 and CI-077	Physical: Neutral. A short section of new rail barrier would be installed within the western margin of the s170 curtilage of the station (outside of the LEP curtilage). The barrier would be limited to the rail corridor however and would not impact any significant fabric Visual: Negligible. The new rail barrier would be installed within the curtilage of the heritage item, and since it would start about 13m from the end of the platform it would be visible to the public. However, this would only affect a small part of the overall station group, and it would replace an existing fence in the same location. It would be consistent with overall setting of the station group, and as result the visual impact would be minimal Archaeological: Nil. Campsie Station was identified as being part of the Bankstown Line Catchment which was assessed in the AARD as generally having nil to low archaeological potential. Only localised ground disturbance would be required to install the rail barrier; therefore it is expected that there would be little to no impacts to significant archaeology
Federation House (former station master's cottage)	Burwood Rd Bridge	Physical: Neutral. <u>New concrete barrier wall would be installed within the heritage curtilage and would terminate against an existing residential wall. However, it the barrier wall would be separated by a 10mm air gap and would not be structurally connected to the building. As a result, there would be no physical impacts to the structure.</u> Works would be outside of the heritage curtilage Visual: Neutral/Negligible. The planned bollards, <u>and</u> concrete barrier, <u>and taller mesh screens</u> on Burwood Road Bridge would not interrupt views to and from the heritage item, with current views being partially obscured by existing vegetation <u>and with the building being set back</u>. They would not interrupt the visual relationship between the former

Heritage item	Relevant work locations	Impacts
		station master's cottage and Belmore Station on the other side of the road. <u>The installation of a new concrete barrier adjacent to the building would introduce new visible fabric, but it would be relatively minor in scale and would have limited impact on the overall setting of the heritage item</u> Archaeological: Nil
Post-war bus shelter and public lavatories	CI-086 Burwood Rd Bridge	Physical: Neutral. Works at CI-086 would be located along the southern edge of the heritage curtilage about 13m south of the bus shelter and lavatory structures, while the Burwood Road Bridge works would be about 25m away from the structures
		Visual: Negligible. New fencing would be installed along the edge of the heritage item. However, existing fencing is already present along the edge of the rail corridor, therefore, the installation of new barriers in the same location would be consistent with the existing setting. Views to the significant structures would not be interrupted by the new barriers. Similarly the planned bollards and concrete barrier on Burwood Road Bridge would be in keeping with the existing setting, and views towards them from the bus shelter and public lavatories would be partially obscured by the station buildings
		Archaeological: Nil. No potential archaeological remains have been identified in association with the heritage item
Lakemba Pumping Station (WP0003)	CI-121	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new rail barrier would only be visible from the northern edge of the heritage item and would not interrupt views towards the heritage item. There are existing fences along the boundary of the heritage item and the station on the opposite side of the road, so the installation of rail barriers in the same location would be visually consistent with the existing setting
		Archaeological: Nil
War memorial and street trees	CI-135	Physical: Neutral. Works would be located outside of the heritage curtilage
		Visual: Neutral. The new rail barrier would be fully obscured except along the northern edge of the heritage item and would not interrupt views towards the heritage item. There is an existing fence along the boundary of the rail corridor so the installation of rail barriers in the same location would be visually consistent with the existing setting
		Archaeological: Neutral
S2B PAD01	CI-085	Archaeological: Nil. Installation of the rail barrier would require ground penetrations. However, the new rail barrier will adhere to the existing rail fence alignment and will not extend into the footprint of S2B PAD01. Therefore, potential subsurface Aboriginal objects associated with S2B PAD01 would not be impacted

5.3 Statement of heritage impact

A statement of heritage impact has been prepared according to NSW Heritage Office guidelines in Table 12 below.

Table 12: Statement of heritage impact for the errant and hostile vehicles treatment work

Development	Discussion
What aspects of the Proposal respect or enhance the heritage significance of the study area?	None of the proposed impacts would exceed the material affect threshold. A summary of aspects of the Proposal that would respect or enhance the heritage significance of the study area is outlined below: <u>Re-use of materials</u> Where the existing brick parapet wall at Canterbury Station would be removed, the bricks would be salvaged and re-used as part of the fascia that would be applied to the new concrete barrier. This would enable the re-use of some significant fabric and presents a more visually sympathetic option and respect the significant fabric of the overbridge. <u>Design</u> The new safety installations are consistent with railway and safety infrastructure that is expected in association with railway stations, including new bollards, fences and anti-throw screens. The urban design of the vertical protection screens at the station precincts have been designed to be consistent with the architectural approval of minimal visual impact and 'voids not solids'. The installation of non-solid barriers and screens (with plexiglass and perforated metal) allows for visibility through these structures, minimising disruption of views in and around bridges and stations. New concrete barriers match the height of existing parapet wall heights, maintaining and respecting the existing visual impact of these structures. <u>Ongoing use</u> The safety upgrade works facilitate the continued operation of the SWM corridor as a rail carriage service.
What aspects of the Proposal could have a detrimental impact on the heritage significance of the study area?	The potential detrimental visual impacts to most of the station groups would generally be negligible to minor due to the positive interventions noted in the row above (transparency of screens, overall significance of items retained). The works would typically result in neutral visual impacts to any other nearby heritage item, as most of the rail barriers/fences would be installed in the location of existing fences along the rail corridor, and the overall views and settings of these items would be maintained. The removal of the Canterbury Road brick parapet wall and replacement with concrete barriers would have a moderate adverse impact on the heritage significance of the bridge element of Canterbury Station. This would be partially mitigated by the salvage and reuse of the bricks for the fascia of the new barriers, so that it is considered that the impacts to Canterbury Station are consistent with approved impacts for the Southwest Metro Project (see Section 5.4).
Have more sympathetic options been considered and discounted?	The proposed works are generally considered to be the most sympathetic and least impactful means of performing the necessary safety installations to retain the continued operation of the SWM corridor as a rail carriage service. Options for the configuration and location of the new safety installation were considered and more impactful solutions were discounted. As an example, for the Illawarra Road Bridge at Marrickville Station, concrete barriers were proposed to replace the masonry parapet wall which is within the heritage curtilage. With consideration of the adverse heritage impact on the heritage item

Development	Discussion
	from the demolition, barriers are now designed to be placed on the road kerb, retaining the brick parapet wall. Similarly, on Canterbury Road Bridge at Canterbury Station, alternative options for the installation of traffic barriers at the kerb of the bridge were considered but discarded due to the resulting increased visual impact. Where impacts to significant fabric is planned this is typically proposed in order to comply with relevant building and safety standards. For example, at locations with existing horizontal safety screens, it was considered whether there was an opportunity to maintain and void the requirement or reduce the height of a vertical safety screen where vertical protection screens are being installed. Through assessment it was deemed that the existing horizontal safety screens were not complying with ASA standards. The implementation of carefully considered installation that balances heritage impacts against safety will retain the significance of the SWM corridor heritage items, while they continue to serve as components of a crucial transport service for Sydney's public. Architects engaged by Martinus and Metron during the design process considered a number of factors, including the heritage aspects of each location, bus stop locations, DDA compliance, location of existing services, and maintaining views of existing overbridge features where relevant. Key heritage considerations for the Architects during the design process are outlined for some of the stations is outlined below. <u>Marrickville</u> <i>'Layout at Marrickville keeps the strong line of the parapet and ties in with the urban design of the station entry'</i>⁵⁴ <u>Dulwich Hill</u> <i>As the current fencing on the bridge comprises welded steel mesh panels contemporary with the post-1975 reconstruction, replacement with new compliant fencing will not have any adverse impact on the heritage values of the Station buildings or the Group. The new fencing will include a three-rail carriageway barrier less than 1 metre in height, with transparent screens along the outer edges of the footways, allowing views through the fences. Consequently, significant views from Wardell Road to the station will be maintained</i>⁵⁵ <u>Canterbury Station</u> <i>'In order to meet the heritage objects arising from the State Heritage Register and other listings, the design maintains and conserves the bridge structure below road level. Above road level, the brick parapets will be rebuilt as a facing to the new protection screens using, as far as possible, salvaged bricks from the existing parapets'</i>⁵⁶ <u>Belmore Station</u> <i>'The use of glass screens next to the station building provides a more sympathetic treatment to the new structure that is fixed hard up against the heritage building'</i>⁵⁷

⁵⁴ DesignInc, 2024. 'Urban and Landscape Design Report South West Metro Errant and Hostile Vehicle Mitigation: Marrickville Station at Illawarra Road Overbridge'. p. 5

⁵⁵ Metron T2M, 2022. 'CIRA Bridge Works Wardell Rd Overbridge Stage 1 Design Report Southwest Metro Design Services (SMDS) Sydney Metro. p. 44

⁵⁶ Metron T2M, 2022. 'CIRA Bridge Works Canterbury Rd Overbridge Stage 1 Design Report Southwest Metro Design Services (SMDS) Sydney Metro. p. 44

⁵⁷ DesignInc, 2024. 'Urban and Landscape Design Report South West Metro Errant and Hostile Vehicle Mitigation: Belmore Station and Burwood Road Overbridge'. p. 6

Development	Discussion
	<u>Wiley Park Station</u> <i>'As the current fencing on the bridge comprises steel RMS Pedestrian Fence panels, in front of anti-throw screens (city side) and chain-wire fencing (country side), replacement with new compliant fencing will not have any adverse impact upon the heritage values of the Station buildings or Group. Adjacent to the Station (country side), the new fencing will consist of a concrete portal frame with vertical protection screens with glazing panels fixed to the top of the traffic barriers, allowing views through the fence. Consequently, significant views from King Georges Road to the station will be maintained'</i>⁵⁸

5.4 Consistency assessment

The errant and hostile vehicle works would be undertaken within and in the vicinity of several heritage items, including items listed on the SHR, and areas of archaeological potential. These works are consistent with the approved project scope, which includes bridge works, the installation of vehicle collision barriers, and providing/upgrading fencing.

It has been assessed that the errant and hostile vehicle works would generally cause negligible to minor impacts to heritage items where bridge works would be undertaken within heritage curtilages, with only Canterbury Station being subject to moderate impacts. For the remaining heritage items in the vicinity, it has been assessed that there would be neutral physical impacts and neutral to negligible visual impacts. This is consistent with the overall approved impact level for the project, with the SPIR identifying that impacts to the heritage station groups would be moderate while impacts to heritage items in the vicinity would generally be neutral to negligible.⁵⁹ This assessment is also consistent with the findings of the project SoHIs (2024) that have been prepared by Purcell for Aurecon, which determined that the Proposal would generally result in negligible to minor impacts where works are undertaken on significant bridges (with moderate impacts at Canterbury Station).

This assessment has identified six heritage items in the vicinity of the planned works that were not included in the EIS and SPIR. However, it has been assessed that the impacts to most of these items would all be neutral. Only 'Turpentine - Ironbark Forest Understory' (Inner West LEP I1222) would be subject to negligible visual impacts from where new rail barriers are installed within its curtilage. However, the item would not be physically impacted, and its exclusion from the EIS and SPIR was because it was not listed on the LEP at the time of assessment. Given its proximity to Dulwich Hill Station, it would already be visually impacted by the project. Therefore, it is considered that the negligible visual impacts to the heritage item are consistent with the existing project.

It has been assessed that the works would generally cause little to no impacts to archaeological remains, and the overall impact to significant archaeological remains would be nil. This is within the approved archaeological impact level for the project, with the AARD identifying that the project would generally have a minor impact on potential archaeological remains.⁶⁰ There would be nil impacts to S2B PAD01. This is consistent with the findings of the project ACHAR.⁶¹

Overall, it is assessed that the errant and hostile vehicle works are consistent with the existing project approvals (see Table 13).

⁵⁸ Metron T2M, 2022. 'CIRA Bridge Works King Georges Road Overbridge Stage 1 Design Report: Southwest Metro Design Services (SMDS) Sydney Metro. p. 44

⁵⁹ Artefact Heritage, 2018a: Table 32, pp 86-87.

⁶⁰ Artefact 2018b.

⁶¹ Artefact 2018c.

Table 13: Errant and Hostile Vehicles Project heritage impacts consistency with approved impacts as identified in SPIR⁶²

Item	Significance	Direct Impact – SPIR	Visual Impact – SPIR	Potential Direct – SPIR	Significance Level Retained – SPIR	Errant and Hostile Vehicles Project Consistency (Y/N)
Marrickville Station	State	Moderate	Moderate	Negligible	Yes	Yes
South Dulwich Hill Conservation Area	Local	Negligible	Negligible	Negligible	Yes	Yes
Dulwich Hill Station	Local	Moderate	Moderate	Negligible	Yes	Yes
Hurlstone Park Station	Local	Moderate	Moderate	Negligible	Yes	Yes
Canterbury Station	State	Moderate	Moderate	Negligible	Yes	Yes
Belmore Station	State	Moderate	Moderate	Negligible	Yes	Yes
Lakemba Station	Local	Moderate	Moderate	Negligible	Yes	Yes
Punchbowl Station	Local	Moderate	Moderate	Negligible	Yes	Yes
Wiley Park Station	Local	Moderate	Moderate	Negligible	Yes	Yes

⁶² Artefact Heritage Services, 2018. 'Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade: Submissions and Preferred Infrastructure Report Non-Aboriginal Heritage Assessment'. Report to Transport for NSW. Table 33

6.0 CONCLUSION

6.1 Conclusion

Planned errant and hostile vehicle treatment works would be undertaken at 15 bridge locations and 66 non-bridge locations along the SWM alignment. It has been identified that these works would be located within or near 27 heritage items or archaeological catchments that include a combination of local and State heritage items, including three items listed on the SHR. It has been identified that the planned works would cause physical and visual impacts to some of these heritage items.

The works at these locations would generally involve bridge safety treatments and the installation of off-bridge barriers. The bridge works would include the removal of existing safety barriers and screens, and the installation of new concrete and steel rail barriers, vertical safety screens, and associated modifications of bridge fabric. It has been identified that these works would cause impacts to significant fabric at some of the heritage items.

Overall, it has been assessed that the errant and hostile vehicle mitigation treatments would typically cause negligible to minor impacts to heritage items where bridge works are undertaken within heritage curtilages. Works to the Canterbury Road Bridge at Canterbury Station would have a moderate adverse impact to the bridge element as a result of the demolition of the existing brick parapet wall, but this would be partially mitigated by the salvage and reuse of the bricks for the fascia of the new barriers. For the remaining heritage items in the vicinity, it has been assessed that the proposed works would typically result in neutral physical impacts and neutral to negligible visual impacts. The material threshold would not be exceeded at any of the heritage items.

Of the relevant heritage items, six have been identified in the vicinity of the planned works that were not included in the EIS and SPIR. However, it has been assessed that the impacts to most of these items would be neutral. Only 'Turpentine - Ironbark Forest Understory' (Inner West LEP I1222) would be subject to negligible visual impacts, however, this is considered to be consistent with the existing level of impacts from the broader project.

It has been identified that works would be undertaken within the archaeological Marrickville, Canterbury, Belmore, and Lakemba Station Catchments. However, works would be limited to areas of AMZ 2 and AMZ 3 where little to no significant archaeological remains are expected to be present. The remaining work locations would be limited to the Bankstown Line Catchment (AMZ 3), which has been assessed as having nil to low potential. Overall, it is expected that there would be nil impacts to significant non-Aboriginal archaeological remains. There would be no harm to the area of Aboriginal archaeological potential, S2B PAD01.

Overall, it is assessed that the errant and hostile vehicle works are consistent with the existing project approvals and impact levels.

6.2 Recommendations and mitigation measures

The following recommendations are made to assist with the mitigation and management of heritage impacts associated with the works.

6.2.1 Built heritage

6.2.1.1 Prior to construction

- If changes to the scope of the works occur, further heritage assessment will be required to capture the additional impacts. In particular, this report will need to be updated when the Stage 3 design documentation is available
- The general requirements for the installation of new structures and required new services from the following documents should be considered:
 - *How to Carry out Work on Heritage Buildings & Sites* (NSW Heritage Office, 2002)
 - *Sydney Trains Heritage Technical Notes: Fixing Methods at Heritage Sites*
 - *Sydney Trains Heritage Technical Notes: Installation of New Electrical and Data Services at Heritage Sites* (Sydney Trains 2017)
- In the first instance, retain and conserve elements of high heritage significance where possible
- As part of the proposed works, condition inspections should be undertaken prior to, during and following completion of the work. Any repair works to heritage significant fabric should reinstate “like for like” and match the existing fabric. The repair works should be undertaken in consultation with the nominated Heritage Architect in accordance with REMM NAH 20, and Heritage NSW where appropriate, and should be documented
- A Photographic Archival Recording (PAR) of the areas impacted by the works is not recommended as these works have been captured in the PARs previously prepared for the project in accordance with REMM NAH 13
- Opportunities for the implementation of heritage interpretation at the stations in accordance with the Heritage Interpretation Strategies that have been prepared for the project should be considered as part of the detailed design process. This may include the installation of artwork on new barriers or bollards
- New services and equipment are to be rationalised and should not cover decorative fabric. Design for installation of services would be verified and/or revised in consultation with a Heritage Architect once final designs are available for review

6.2.1.2 During construction

- All staff, including design professionals and tradespeople, involved in the works within or in the vicinity of heritage items that would be impacted, as assessed in this report, must receive a heritage induction and briefing prior to the commencement of works. The heritage induction should cover the heritage significance of the heritage items, identification of significant fabric and the recommendations and mitigation methods included in this report. This would apply to the following heritage items:
 - Marrickville Station
 - Dulwich Hill Station
 - South Dulwich Hill Conservation Area
 - Turpentine-Ironbark Forest Understorey
 - Canterbury Station

- Hurlstone Park Station
- Belmore Station
- Lakemba Station
- Wiley Park Station
- Punchbowl Station
- All works to, and in the vicinity of significant heritage fabric must be coordinated with the heritage architect in accordance with REMM NAH20, to ensure they are conducted in accordance with relevant heritage controls in this SoHI and other heritage related documents
- Works on Albermarle Street Bridge must take care to avoid impacts to the Depression era brick paving. If temporary laydown areas or access paths are required near to, or over the brick paving, then impact protection measures must be implemented to protect the paving, such as coverings or ramps.
- If Depression era bricks need to be removed temporarily, the minimum number of bricks should be removed and then reinstated in the same herringbone pattern as existing, without grout or mortar. If mortar or grout is required for the relaying of the pavers, the materials should match existing and no cementitious materials are to be used
- When removing the original brick parapet walls at the Canterbury Road Bridge:
 - Masonry deconstruction and reconstruction should be conducted by tradespeople with demonstrated experience in managing and repairing heritage masonry, under the advice and supervision of the contractor's heritage architect
 - Salvage of brickwork should be conducted by hand as much as possible, with the least number of vertical saw cuts provided. Saw cuts should be conducted between brick courses and not through brick courses wherever possible
 - Salvaged brickwork should be managed with care following removal to ensure inadvertent damage does not occur to bricks during transport and storage
 - Salvaged bricks are to be stored by the contractor in a secure dry location nominated by Sydney Metro
 - As not all bricks are expected to be salvaged intact, new replacement brick would be required. Replacement bricks must be appropriately matched in colour, dimensions, texture, type of aggregate and the range of colour and aggregate variation to existing brick
 - Brick matching should be conducted with on-site comparison of existing and replacement bricks, with a moderate sample size of replacement brick, to ensure that matching qualities are met
 - Bricks should be re-laid in the original pattern and bond as the existing parapet and retaining walls where possible, including existing angled sills and soffit courses
 - New brick and original brick should be installed in consolidated sections and not intermixed, so that new and original fabric can be discerned.
 - Additional time should be allotted during the construction program for the reconstruction works if hand deconstruction and reconstruction is not tenable during existing possession period estimates

- The bricks removed from demolished parapet walls at non-heritage listed bridges (Duntroon Street and Livingston Road bridges) are not required to be salvaged or reused. These bricks are not of heritage significance, and as they are painted, their compatibility with other bricks salvaged for reuse at heritage sites cannot be determined
- Where compressive filler material is planned be used between new concrete paths and existing brick masonry of parapet walls, the new material should be carefully installed so as to retain the integrity of the fabric it adjoins.
- When undertaking works in close proximity to significant fabric, impact or splash protection should be used where necessary to ensure that the surrounding fabric is not impacted. This may include the use of sound/construction blankets, geofabric, or other protective materials
- All works must be conducted in accordance with the relevant provisions of the CHMP and in the CEMP for the project
- Known items of heritage significance are to be labelled on Environmental Control Maps
- The following mitigation measures need to be undertaken during construction to protect heritage significant fabric in accordance with the *TfNSW Temporary works and protection at heritage sites during construction fact sheet*:⁶³
 - Avoid accidental damage to significant fabric with thorough planning, site-specific inductions and physical protection measures
 - No construction materials are to be stockpiled or stored against heritage items or trees. Clear delineation must be provided
 - Vibration monitoring is to be undertaken in accordance with the required standards for works in the vicinity of heritage elements
- The following mitigation measures need to be undertaken during construction of the new fence (CI 109) within and adjoining the Turpentine-Ironbark Forest Understorey to prevent impacts to sensitive vegetation:
 - The Turpentine-Ironbark Forest Understorey is to be labelled on Environmental Control Maps
 - Ensure that the works do not impact any significant vegetation (including trees and grasses) thorough planning, site-specific inductions and physical protection measures
 - Implement any additional environmental controls necessary to protect the endangered ecological community and in accordance with best practice guidelines⁶⁴
 - Maintain any existing Sydney Trains grass 'no-mow' zones in the vicinity of the works
- Existing penetrations into original fabric should be utilised where introduced fabric (new services and equipment) is to be located. Any existing penetrations that would not be utilised for new works should be repaired and made good

⁶³ Transport for NSW, 2023. *The Temporary works and protection at heritage sites during construction fact sheet EMF-HE-FS-0166*.

⁶⁴ Department of Environment & Climate Change NSW, 2008. *Best practice guidelines: Sydney Turpentine-Ironbark Forest*. Accessed online at: <https://www.environment.nsw.gov.au/resources/threatenedspecies/08528tsdssydturpironforestbpg.pdf>.

- Above ground service installation should endeavour to use existing penetrations and entry points to structures. Services should not cover significant fabric or areas of detailing wherever possible. Services should not introduce large noticeable structures or items in areas of significant detailing or within significant view lines. During detailed design, services should adhere to the principles and guidelines outlined in the Heritage Technical Note, Installation of New Electrical and Data Services at Heritage Sites (Sydney Trains, 2017) to prevent minor cumulative impacts to fabric from occurring due to ad hoc service design solutions. Service design solutions should avoid ad hoc solutions which can cause further physical and visual impacts to heritage significant fabric
- Undertake all demolition work, removal of modern accretions and the like carefully and by hand to avoid damage to surrounding heritage fabric
- Existing penetrations are to be used where possible when introducing new services and equipment to limit change to heritage fabric
- Following removal of any modern elements, redundant penetrations, accretions and the like, repair and make good fabric as required and in accordance with best practice conservation techniques in consultation with specialist tradespeople and the heritage architect
- Where necessary clean all heritage fabric of dirt, organic growth, guano and other debris using low pressure warm water, biocide and a stiff bristle (non-ferrous) brush. Do not use aggressive or harsh chemicals, sand blasting or other abrasive means
- Allow for making good all existing surfaces exposed after removal of existing fixtures and fittings
- Unexpected or undocumented dilapidation of fixtures or materials discovered during the works should be brought to the attention of the nominated heritage consultant and heritage architect.

6.2.2 Archaeology

- It is recommended that excavations for the works be managed under the *Sydney Metro Unexpected Heritage Finds Procedure* and *Exhumation Management Procedure* in accordance with the management strategies for AMZ 3 as outlined in the AARD and in the ACHAR
- Works would be undertaken within AMZ 2 at Marrickville Station, Belmore Station, and Lakemba Station. However, as the excavations would be minor in nature and limited to areas not expected to contain significant archaeology, it is considered that archaeological monitoring would not be necessary. It is recommended that management of these excavations under AMZ 3 would be sufficient as outlined in the appended Archaeological Method Statement
- The location of the historical station archaeological catchments and the area of Aboriginal archaeological potential, S2B PAD01, must be shown on Environmental Control Maps
- The boundaries of S2B PAD01 must be marked out before undertaking works for CI-085 to ensure that excavations do not enter the mapped area of the PAD.

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11 July 2025

Phil Matevski

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via email: phillip.matevski@martinus.com.au

Dear Phil,

The following Consistency Assessment has been prepared to assess proposed modifications to the design of the scope of works at Canterbury Railway Station as part of the errant and hostile vehicle mitigation treatments being undertaken for the Southwest Metro Project (SWM), which involves upgrading the 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13-kilometre-long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and west of Bankstown Station. This report assesses proposed works not explicitly outlined in the approved works design. The review assesses the proposal against the Conditions of Approval (CoA) which were granted for the project, which was declared a Critical State Significant Infrastructure project (CSSI 8256) by the Minister for Planning under the *Environmental Planning & Assessment Act 1979* on 12 December 2018.

Overall, it is considered that these changes are consistent with the intent of the approved designs. This conclusion is based on the assessment that the proposed changes would have **little to no** additional adverse physical impacts to significant fabric, do not cause any operational impact, and have **little to no** additional adverse visual impact on the setting of Canterbury Railway Station.

Please do not hesitate to get in contact should you require further information.

Kind Regards,

Jayden van Beek

Technical Specialist | Technical Team

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Cultural Heritage Management | Archaeology | Heritage Interpretation | Environmental Services

1.1 Introduction

The following terminology has been used to assess the consistency of the impact in the proposed changes to the approved design and works; the proposed changes would apply to the SHR curtilage of Canterbury Station.

The terminology and definitions are based on those contained in guidelines produced by the International Council on Monuments and Sites (ICOMOS)¹ and the Heritage Council of NSW (now Heritage NSW)² and are shown in Table 1. Table 1 contains terminology for assessing heritage impacts that has been updated per Heritage NSW's Material Threshold Policy since the Statement of Heritage Impact (SoHI)³ which was prepared to inform the Construction Heritage Management Plan (CHMP.)

Table 1: Terminology for assessing the magnitude of heritage impact

Grading	Definition
Total loss of significance	Major adverse impacts to the extent where the place would no longer meet the criteria for listing on the SHR.
Adverse impact	Major (that is, more than minor or moderate) adverse impacts to State heritage significance.
	Moderate adverse impacts to State heritage significance.
	Minor adverse impacts to State heritage significance.
Little no impact	An alteration to State heritage significance that is so minor that it is considered negligible. * Little to no impact (as opposed to no impact) acknowledges that any change will result in some level of impact/alteration to State heritage significance.
Positive	Alterations that enhance the ability to demonstrate the State heritage significance of an SHR listed place.

Table 2: Terminology for heritage impact types⁴

Impact	Definition
Physical	Impacts resulting from works located within or outside the curtilage boundaries of the heritage item, caused by removing or altering the item or fabric of heritage significance
Visual	Impact to views, vistas and setting of the heritage item resulting from proposed works outside the curtilage boundaries of the heritage item.
Potential	Impacts resulting from increased noise, vibrations and construction works located outside the curtilage boundaries of the heritage item.
Archaeological	Impacts to potential archaeological remains located within the curtilage boundaries of the heritage item.

¹ Including the document Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS, January 2011.

² Heritage NSW, *Material Threshold Policy*, <https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/material-threshold-policy.pdf>.

³ Artefact, *Southwest Metro Errant and Hostile Vehicles Project Statement of Heritage Impact*, November 2024.

⁴ Derived from Guidance and Toolkit for *Impact Assessments in a World Heritage Context* (ICOMOS and UNESCO 2022) and *ICOMOS Guidance On Heritage Impact Assessments For Cultural World Heritage Properties*, 2011.

1.2 Proposed works and reasoning

The proposed modifications to the approved design include the replacement of the existing staircase of the station Signal Hut, as well as the selection of replacement bricks to rebuild the parapet wall of the overbridge on Canterbury Road.

Staircase replacement

The existing metal staircase is attached to the Signal Hut's external timber walls via penetrative fixings, however its exact age is indeterminate. As the Signal Hut (a structure of high significance to Canterbury Station) is timber, the original stairs, balustrade, and landing were most likely simple timber posts and rails. The existing stairs (as well as the attached balustrade and landing) are constructed from metal, and are likely not original fabric, but were probably installed after the construction of the eastern annex c.1968. The existing staircase is therefore of little significance to the Signal Hut, whereas the fabric of the external walls is largely original, and is of high significance.

The proposed modifications include the replacement of this staircase with a similar metal staircase (in the same general location and alignment, attached to the Signal Hut using existing penetrations where possible. Further penetrative fixings, if required, will be limited strictly those necessary for the new staircase's safe and secure attachment.

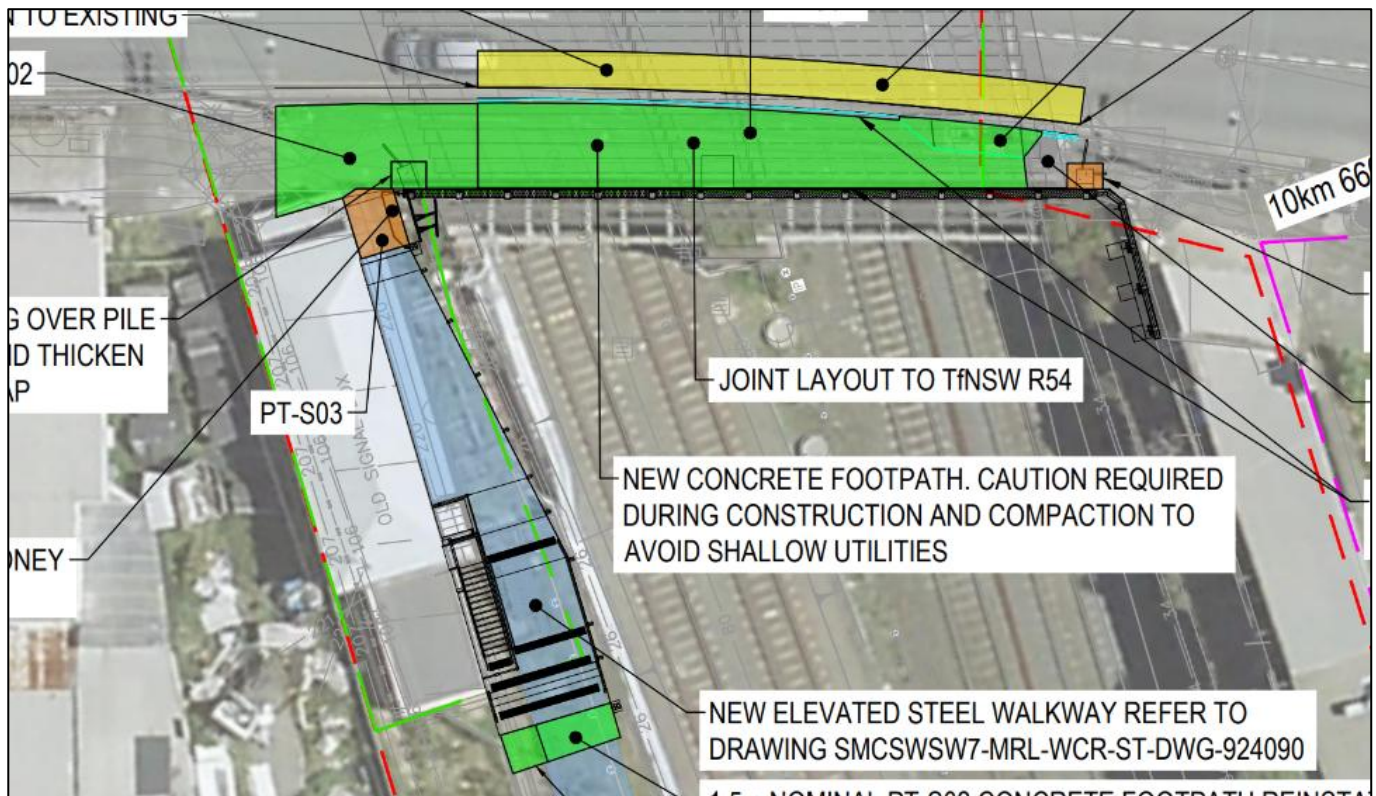


Figure 1: Plan of the location for the proposed replacement staircase (Source: Aurecon, 2025)

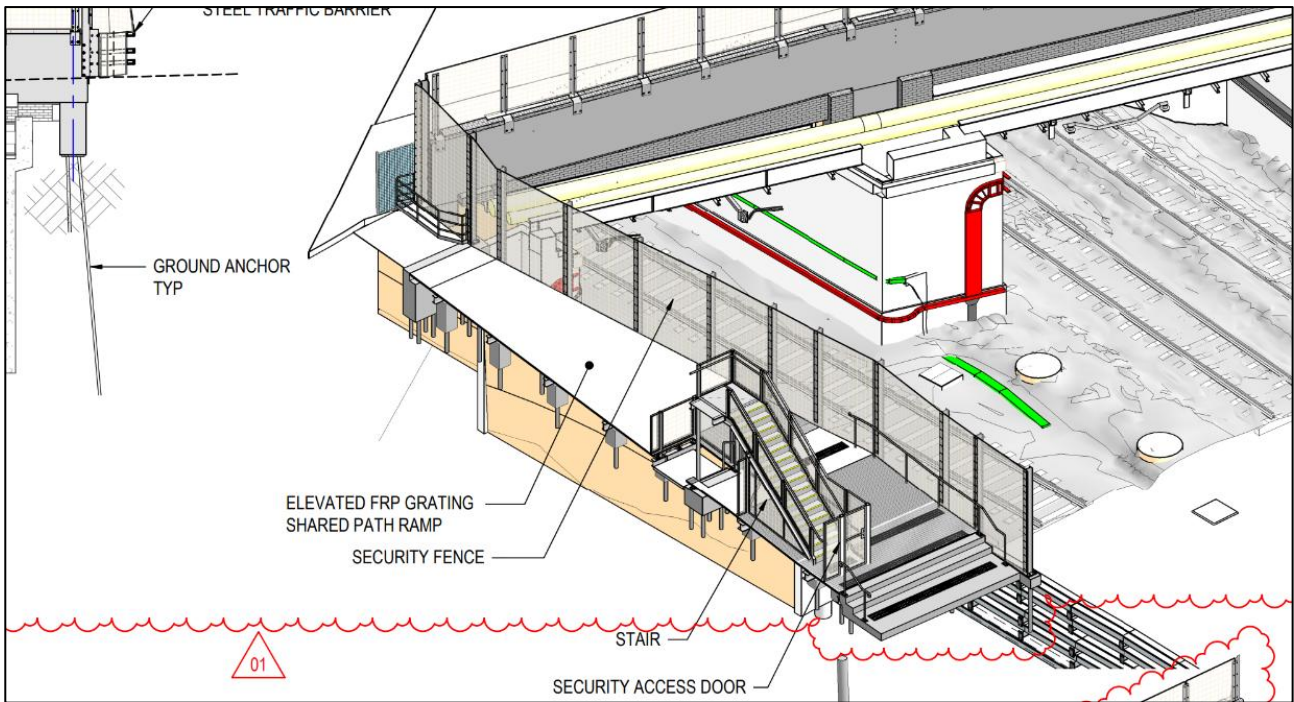


Figure 2: 3D render of the proposed replacement staircase (Source: Aurecon, 2025)

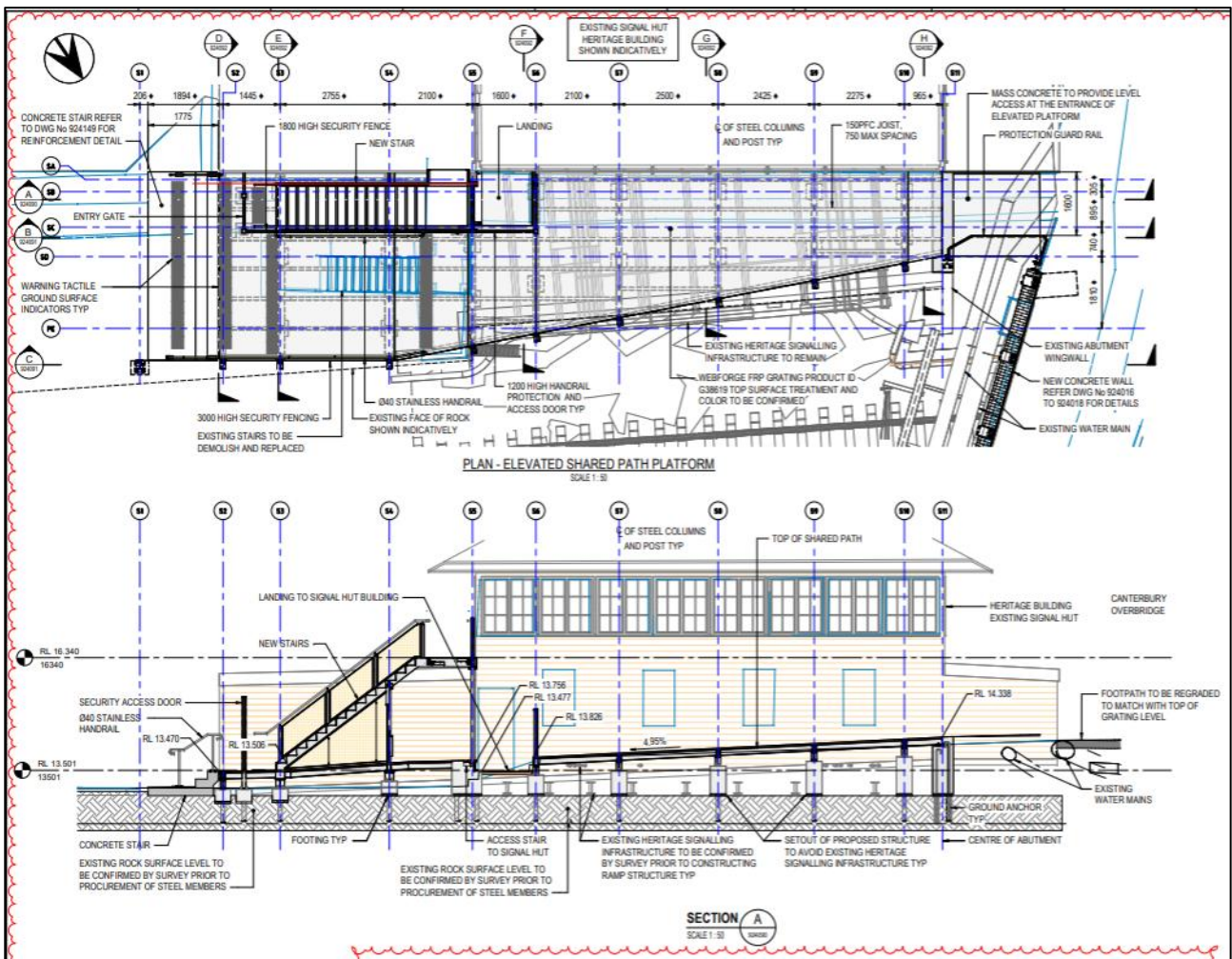


Figure 3: Diagram of the proposed replacement staircase (Source: Aurecon, 2025)

Replacement brick selection

The original parapet wall of the Canterbury Road overbridge within the SHR curtilage was demolished in accordance with the approved works assessed in the 2024 SoHI (outlined below in Section 1.3.1). Additional work was approved which was intended to follow the demolition, namely that a new wall would be constructed to replace it using concrete, with a salvaged brick fascia. Upon investigation, it has been determined by Artefact as heritage experts, and by ADE as experts in contaminants analysis, that the bricks collected from the demolished wall are unsuitable to be reused, due to staining from weather and mortar, as well as lead paint contamination. Though the original parapet wall was considered an element of high significance to Canterbury Station, the approved replacement wall (when completed) will consist of a new addition to the station's curtilage, and will therefore be an element of little heritage significance.

Subsequently, replacement bricks (Bowral 76 Renovation Gertrudis Brown, depicted below in Figure 4) are proposed which would be suitable to be used as the fascia of the concrete parapet wall.

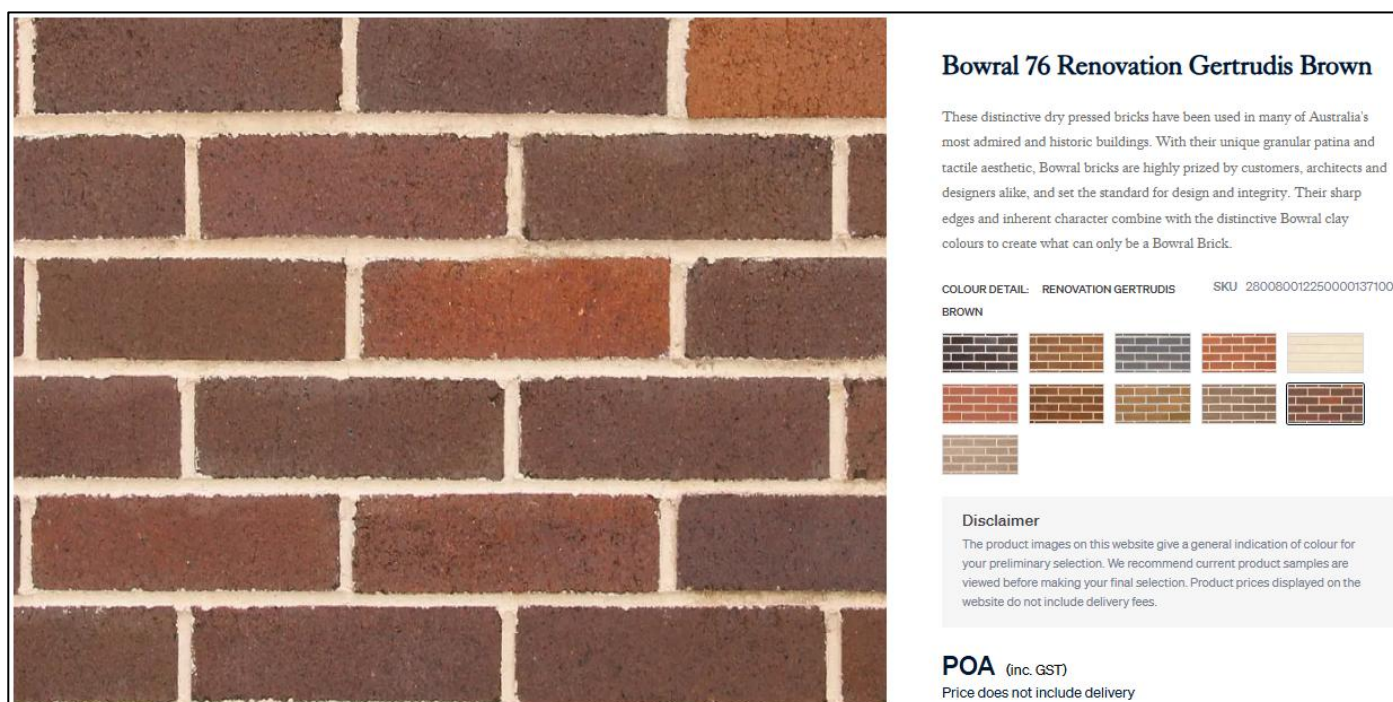


Figure 4: The replacement bricks proposed to be used as the fascia for the approved concrete parapet wall
(Source: Bowral Bricks, <https://www.bowralbricks.com.au/nsw/280080012250000137100>)

1.3 Consistency assessment

The following section identifies the proposed changes to the scope of works. Artefact provides an assessment of these changes in order to identify whether the changes are consistent with the approved works for the SWM project.

This Consistency Assessment should be read in conjunction with the SoHI written by Artefact in 2024,⁵ as well as the earlier heritage impact memorandum included as Appendix F in the Submissions and Preferred Infrastructure Report (SPIR) for the SWM project.⁶

⁵ Artefact, *Southwest Metro Errant and Hostile Vehicles Project Statement of Heritage Impact*, November 2024

⁶ Artefact, *Memo: Sydney Metro City & Southwest -Sydenham to Bankstown Upgrade*, Appendix F in *Sydenham to Bankstown Submissions and Preferred Infrastructure Report*, June 2018

1.3.1 Impact assessment

The original design of approved works included the following:

- Removal of existing brick parapet walls on the city (east) and country (west) sides of the bridge
- Installation of new TL4 concrete barriers with salvaged brick fascia on the roadside
- Demolition, replacement and regrading of existing concrete footpath
- Blast clean and repair the top flange of the bridge girders and weld shear studs to the flange
- Demolition of existing footpath canopy roof and columns
- Installation of new protection screens
- Installation of new security fencing
- Piling and the construction of piling caps
- Installation of new utilities which may be fixed to the brickwork of the bridge.

The approved works at Canterbury Station were assessed in the 2024 SoHI as having overall **moderate** adverse physical impacts and **moderate** adverse visual impacts on the heritage significance of the SHR item. In the 2018 SPIR, impacts to the station Signal Box specifically were assessed as being **neutral** direct (i.e., **little to no adverse** physical impact under current terminology guidelines). The 2024 assessment of heritage impacts is considered to be consistent with the 2018 assessment of heritage impacts (depicted in Figure 5 and Figure 6).

Overbridge (c.1917)	High	Retention and upgrade	Moderate	Retained	It is proposed to install throw screens on the city side of the Canterbury Road overbridge. Vehicle barriers would be installed on the north side of the bridge, as well as other minor upgrades for safety as required. The proposed works would have a minor direct impact on the heritage values of the overbridge and station overall.	Minor
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Figure 5. Extract of Table 14 in the 2018 SPIR showing a neutral direct impact to the overbridge (Source: Artefact, 2018)

Signal box (1915)	High	Retention	Neutral	Retained	The signal box would be retained as is and would not be affected by the project. This would result in a neutral impact on the signal box.	Neutral
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Figure 6. Extract of Table 14 in the 2018 SPIR showing a neutral direct impact to the Signal Box/Hut (Source: Artefact, 2018)

The proposed modifications to the station's Signal Hut staircase and overbridge parapet wall have been assessed as having overall **little to no** heritage impact, for the following reasons:

- The proposed replacement staircase to be attached to the Signal Hut would be similar in materiality and scale to the extant staircase, and would reuse existing penetrations wherever possible while limiting new penetrative fixings to those strictly necessary to securely attach the new staircase. It is assessed therefore that the replacement staircase would have **little to no adverse** physical impacts on the heritage significance of Canterbury Station, and would not exceed the impacts assessed in the 2024 SoHI for the approved works.
- The proposed replacement bricks' suitability in the heritage context is determined by their appropriate colouration and dimensions. It is assessed that they would have **little to no adverse** physical or visual

impacts on the heritage significance of Canterbury Station, and would not exceed the impacts assessed in the 2024 SoHI for the approved works.

Overall, the replacement of the Signal Hut staircase, and the use of Bowral 76 replacement bricks as the fascia for the approved parapet wall, would have **little to no adverse** physical and visual impacts on the significance of Canterbury Station. They would be consistent with the approved level of heritage impacts for the SWM project.

Although the replacement staircase would introduce new fabric into the SHR curtilage of Canterbury Station, it would be similar in scale, appearance, and location to the extant staircase, which is of little heritage significance, but not considered intrusive. As noted above, the methodology for fixing the replacement staircase would preference existing penetrations in the highly significant fabric of the Signal Hut. In the event new penetrations are required to securely attach the replacement staircase, they would be restricted to the bare minimum needed. Per previous advice provided by Heritage NSW on necessary new penetrations in SHR-listed railway contexts, the physical impacts of such penetrations are likely to be minimal.

The bricks selected for the fascia of the approved concrete parapet wall would be replacements for recycled bricks. Under the approved works, some of the bricks would be retrieved from the demolished parapet wall on Canterbury Road. Per inspection of sample bricks and analysis for toxic contaminants, it was determined that the bricks would be both too degraded for decorative use, and too contaminated by lead paint to remediate them successfully. An appropriate replacement was therefore sought; the Bowral 76 Renovation bricks were identified, having been used successfully in similar situations. It is Artefact's considered opinion that the Bowral 76 bricks would be suitable in the heritage context of Canterbury Station, as they are appropriate in terms of their colouration and dimensions. Furthermore, as they would be installed in the new fabric of the concrete parapet wall, they would not intrude upon significant heritage fabric.

1.4 Conclusion

The proposed modifications to the approved works have been assessed in accordance with the guidelines produced by ICOMOS⁷ and the Heritage Council of NSW (now Heritage NSW)⁸⁹ and are consistent with the impacts assessed in the SoHI¹⁰ for the approved works under the SWM project (CSSI 8256).

Artefact has assessed that the proposed works constitute **little to no adverse** physical and visual impacts and are consistent with the approved design intent. The proposed works would not constitute an additional impact to the heritage fabric or SHR item as a whole. No further approval beyond the existing CoA is required to facilitate these works.

⁷ Including the document Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS, January 2011.

⁸ Heritage NSW, *Material Threshold Policy*, <https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/material-threshold-policy.pdf>

⁹ Heritage NSW, *Guidelines for preparing a statement of heritage impact*, 2023

¹⁰ Artefact, *Southwest Metro Errant and Hostile Vehicles Project Statement of Heritage Impact*, November 2024

RE: EHVMT - Canterbury Road Parapet Wall - Removal and Salvage

Jayden van Beek <Jayden.vanbeek@artefact.net.au>
To  Phillip Matevski
Cc  Scott MacArthur;  Sandra Wallace;  Noah Green



 Reply

 Reply All

 Forward





Mon 16/12/2024 2:29 PM

-  This sender Jayden.vanbeek@artefact.net.au is from outside your organization.
-  Follow up. Start by Monday, 16 December 2024. Due by Monday, 16 December 2024.
You forwarded this message on 20/12/2024 10:02 AM.

Hi Phil,

The heritage architect has reviewed and accepted the proposed methodology for the removal of the Canterbury Road brick parapet wall and the vibration monitoring.

It is noted the SoHI recommended that the brick salvage should be conducted by hand as much as possible, with the least number of vertical cuts and saw cutting between brick courses and not through brick courses wherever possible. While the proposed methodology would involve cutting through bricks for each 600-800mm section, it is acknowledged that this methodology would enable the efficient removal of the bricks which will then be moved offsite where more time can be spent separating the bricks for future re-use. This is considered to be acceptable.

To minimise risk of damage to the sections of brick parapet during transport, it is recommended that:

- Each section of brick parapet must be wrapped/covered with protective material (such as geofabric) to protect them from being struck by other sections of brick during transportation
- The sections of brick parapet must be packed in a way that will minimise the risk of them moving/falling in the skip bin during transportation.

If the proposed methodology is followed, then the heritage architect would not need to supervise the removal of the bricks. If requested though I can attend site on the day to verify that the methodology is being properly implemented.

Regarding the vibration monitors, as these are proposed to be attached with double sided tape that would allow for easy removal when works are finished, no harm is expected. Therefore the proposed methodology is good.

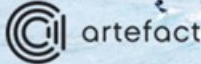
Thanks,

Jayden van Beek
Technical Specialist

M T W T F
✓ ✓ ✓ ✓ ✓

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  Artefact acknowledges Aboriginal and Torres Strait Islander peoples as the traditional owners and custodians of the lands and waters of Australia. We acknowledge the Gadigal and Wangal people of Pirrama (Pyrmont) where our Sydney office is located, the Awabakal, Worimi and Wonnarua of the Hunter Region where our Mulubinba (Newcastle) office is located and the Wiradyuri of the Central West where our Bathurst office is located. We pay our respects to them, their culture and their Elders past and present. We thank them for sustaining and caring for Country for millennia.



Our offices will be closed from
Mon 23 Dec 2024 and will
re-open on Mon 6 Jan 2025

APPENDIX C – Registered Aboriginal Parties

The list of registered Aboriginal stakeholders/Registered Aboriginal Parties (RAPs) and associated contact details for the Project are included below:

Stakeholder
Aboriginal Archaeology Service INC
Bilinga Cultural Heritage Technical Services
DACHA
Darug Land Observations PTY LTD
Duncan Suey & Associates
Gandangara Local Aboriginal Land Council
Gundungurra Tribal Technical Services
Gunyu Cultural Heritage Technical Services
Kamilaroi-Yankuntjatjara Working Group
Metropolitan Local Aboriginal Land Council
Munyunga Cultural Heritage Technical Services
Murri Bidgee Mullangari Aboriginal Corporation
Murrumbul Cultural Heritage Technical Services
Tocomwall
Wingikara Cultural Heritage Technical Services
Woronora Plateau Gundangarra Elders Council

APPENDIX D – Sydney Metro Unexpected Heritage Finds Procedure



Sydney Metro Unexpected Heritage Finds Procedure

[SM-18-00105232]

Sydney Metro Integrated Management System (IMS)

Applicable to:	Sydney Metro
Document Owner:	Author/Document owner
System Owner:	IMS element owner (generally a member of the Executive)
Status:	Draft/Final
Version:	2.0
Date of issue:	19 March 2019
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Table of contents

1.	Purpose	3
1.1.	Legislation that does not apply	3
2.	Scope.....	4
3.	Definitions	4
4.	Types of unexpected heritage items and corresponding statutory protections	5
4.1.	Aboriginal objects.....	5
4.2.	Historic heritage items.....	6
4.2.1.	Archaeological relics	6
4.2.2.	Other historic items	6
4.3.	Human skeletal remains.....	7
5.	Legislative Requirements	7
6.	Unexpected heritage finds protocol	9
6.1.	What is an unexpected heritage find?	9
6.2.	Managing unexpected heritage finds.....	10
7.	Responsibilities	15
8.	Seeking Advice	16
9.	Related documents and references.....	16
10.	List of appendices	16
11.	Document history	17
	Appendix 1: Examples of finds encountered during construction works	18
	Appendix 2 - Unexpected heritage item recording form.....	24
	Appendix 3 - Photographing unexpected heritage items	26
	Appendix 4 - Uncovering bones	29
	1. First uncovering bones.....	29
	2. Range of human skeletal notification pathways.....	30
	3. Additional considerations and requirements.....	31
	Appendix 5 - Archaeological/heritage advice checklist.....	33
	Appendix 6 - Template notification letter.....	34

Figures

Figure 1 Overview of steps to be undertaken on the discovery of an unexpected heritage item	10
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Tables

Table 1 Legislation and guidelines for management of unexpected heritage finds.....	8
Table 2 Specific tasks to be implemented following the discovery of an unexpected heritage item	10
Table 3 Roles and Responsibilities.....	15

1. Purpose

This procedure is applicable to the Sydney Metro program of works including major projects delivered under Critical State Significant Infrastructure Planning Approvals (CSSI), early CSSI minor and enabling works and works that are subject to the NSW Heritage Act (1977) including s57/139 and s60/140 exemptions and permit approvals.

This procedure has been prepared for Sydney Metro programs to provide a method for managing unexpected heritage items (both Aboriginal and non-Aboriginal) that are discovered during preconstruction (pre-Construction Heritage Manage Plan approval), construction phases (post Construction Heritage Manage Plan approval) and for works subject to the NSW Heritage Act (1977).

An ‘unexpected heritage find’ can be defined as any unanticipated archaeological discovery, that has not been previously assessed or is not covered by an existing approval under the Heritage Act 1977 (Heritage Act) or National Parks and Wildlife Act 1974 (NPW Act).

In NSW, there are strict laws to protect and manage heritage objects and relics. As a result, appropriate heritage management measures need to be implemented to minimise impacts on heritage values; ensure compliance with relevant heritage notification and other obligations; and to minimise the risk of penalties to individuals, Sydney Metro and its contractors. This procedure includes Sydney Metro’s heritage notification obligations under the Heritage Act, NPW Act and the Coroner’s Act 2009 and the requirements of the conditions of approval (CoA) issued by NSW Department of Planning and Environment.

Note that a Contractor must not amend the Sydney Metro Unexpected Finds Procedure without the prior approval of Sydney Metro.

It should be noted that this procedure must be read in conjunction with the relevant CCSI conditionals of approval (if applicable), the contract documents and other plans including the Sydney Metro Exhumation Management Plan and procedures developed by the contractor during the delivery of the Sydney Metro works.

1.1. Legislation that does not apply

The following authorisations are not required for Sydney Metro approved Critical State Significant Infrastructure (and accordingly the provisions of any Act that prohibits an activity without such an authority do not apply):

- Division 8 of Part 6 of the Heritage Act 1977 does not apply to prevent or interfere with the carrying out of approved State significant infrastructure.
- An approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977,
- An Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974,

This document provides relevant background information in Section 4, followed by the technical procedure in Sections 6 and 7. Associated guidance referred to in the procedure can be found in Appendices 1-6.

2. Scope

Despite earlier investigation, unexpected heritage items may still be discovered during works on a Sydney Metro site. When this happens, this procedure must be followed. This procedure provides direction on when to stop work, where to seek technical advice and how to notify the regulator, if required.

This procedure **applies to**:

- the discovery of any unexpected heritage item, relic or object, where the find is not anticipated in an approved Archaeological Assessment Design Report (AARD) or Archaeological Method Statements (AMS) that are prepared as part of the planning approval for that project.

This procedure must be followed by all Sydney Metro staff, contractors, subcontractors or any person undertaking works for Sydney Metro. It includes references to some of the relevant legislative and regulatory requirements, but is not intended to replace them.

This procedure **does not apply** to:

- The discovery and disturbance of heritage items as a result of investigations being undertaken in accordance with the Office of Environment and Heritage's (OEH) *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW 2010*¹; an Aboriginal Heritage Impact Permit (AHIP) issued under the NPW Act; or a permit approval issued under the Heritage Act.
- the discovery and disturbance of heritage items as a result of construction related activities, where the disturbance is permissible in accordance with an AHIP; or an approval issued under the Heritage Act or CSSI /CSSD planning approval;

3. Definitions

All terminology in this procedure is taken to mean the generally accepted or dictionary definition with the exception of the following terms which have a specifically defined meaning:

	Definitions
AHIP	Aboriginal Heritage Impact Permit
Aboriginal object	An Aboriginal object is any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains. An Aboriginal object may include a shell midden, stone tools, bones, rock art, Aboriginal-built fences and stockyards, scarred trees and the remains of fringe camps.
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSD	Critical State Significant Development
CSSI	Critical State Significant Infrastructure
EP&A Act	NSW Environmental Planning and Assessment Act 1979
Excavation	A person that complies with the Heritage Council of NSW's Criteria for Assessment of

¹ An act carried out in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* as published by the Department in the Gazette on 24 September 2010 is excluded from the definition of **harm** an object or place in section 5 (1) of the NPW Act.

Director	Excavation Directors (July 2011) to oversee and advise on matters associated with historic archaeology. Note this applies to a specific project/program and requires consultation and/or approval by OEH.
Heritage Act	NSW <i>Heritage Act 1977</i>
NPW Act	NSW <i>National Parks and Wildlife Act 1974</i>
OEH	Office of Environment and Heritage
SM	Sydney Metro
Relic (non-Aboriginal heritage)	A relic means any deposit, artefact, object or material evidence that: a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and b) is of State or local significance. A relic may include items such as bottles, utensils, remnants of clothing, crockery, personal effects, tools, machinery and domestic or industrial refuse.
TfNSW	Transport for New South Wales
Work (non-Aboriginal heritage)	Archaeological features such as historic utilities or buried infrastructure that provide evidence of prior occupations such as former rail or tram tracks, timber sleepers, kerbing, historic road pavement, fences, culverts, historic pavement, buried retaining walls, cisterns, conduits, sheds or building foundations, but are also subject to assessment by the Excavation Director to determine its classification

4. Types of unexpected heritage items and corresponding statutory protections

The roles of project, field and environmental personnel (including construction contractors) are critical to the early identification and protection of unexpected heritage items.

Appendix 1 illustrates the wide range of heritage discoveries found on Sydney Metro projects and provides a useful photographic guide. Subsequent to confirmation of a heritage discovery it must then be identified and assessed by Excavation Director. An 'unexpected heritage item' means any unanticipated discovery of an actual or potential heritage item, for which Sydney Metro does not have approval to disturb² and/or have an existing management process in place.

These discoveries are categorised as either:

- (a) Aboriginal objects
- (b) Historic (non-Aboriginal) heritage items
- (c) Human skeletal remains.

The relevant legislation that applies to each of these categories is described below and is also addressed in the Sydney Metro Exhumation Management Plan).

4.1. Aboriginal objects

The NPW Act protects Aboriginal objects which are defined as:

² Disturbance is considered to be any physical interference with the item that results in it being destroyed, defaced, damaged, harmed, impacted or altered in any way (this includes archaeological investigation activities).

“any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”³.

Examples of Aboriginal objects include stone tool artefacts, shell middens, axe grinding grooves, pigment or engraved rock art, burials and scarred trees.

IMPORTANT!

All Aboriginal objects, regardless of significance, are protected under law.

If any impact is expected to an Aboriginal object, an AHIP is usually required from OEHS. Also, when a person becomes aware of an Aboriginal object they must notify the Director-General of OEHS about its location⁴. Assistance on how to do this is provided in Section 7 (Step 5).

4.2. Historic heritage items

Historic (non-Aboriginal) heritage items may include:

- Archaeological ‘relics’
- Other historic items (i.e. works, structures, buildings or movable objects).

4.2.1. Archaeological relics

The Heritage Act protects *relics* which are defined as:

“any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance”⁵.

Relics are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW, and can include bottles, remnants of clothing, pottery, building materials and general refuse.

IMPORTANT!

All relics are subject to statutory controls and protections.

If a relic is likely to be disturbed, a heritage approval is usually required from the NSW Heritage Council⁶. Also, when a person discovers a relic they must notify the NSW Heritage Council of its location⁷.

4.2.2. Other historic items

Some historic heritage items are not considered to be ‘relics’, but are instead referred to as works, *buildings, structures or movable objects*. Examples of these items that may be encountered include *culverts, historic pavements, retaining walls, tramlines, rail tracks, timber sleepers, cisterns, fences, sheds, buildings and conduits*. Although an approval under the Heritage Act may not be required to disturb these items, their discovery must be managed in accordance with this procedure.

³ Section 5(1) NPW Act.

⁴ This is required under section 89(A) of the NPW Act and applies to all Sydney Metro projects.

⁵ Section 4(1) Heritage Act.

⁷ This is required under section 146 of the Heritage Act and applies to all Sydney Metro projects.

As a general rule, an archaeological relic requires discovery or examination through the act of excavation. For an unexpected find an archaeological excavation permit under section 140 of the Heritage Act may be required to do this. In contrast, 'other historic items' either exist above the ground surface (e.g. a shed), or they are designed to operate and exist beneath the ground surface (e.g. a culvert).

4.3. Human skeletal remains

Also refer to Sydney Metro Exhumation Management Plan for a more detailed explanation of the approval processes.

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more. Depending on ancestry and context, different legislation applies.

As a simple example, a pre-European settlement archaeological Aboriginal burial would be protected under the NPW Act, while a historic (non-Aboriginal) archaeological burial within a cemetery would be protected under the Heritage Act. For a non-Aboriginal archaeological burial, the relevant heritage approval and notification requirement described in Section 3.1 would apply. In addition to the NPW Act, finding Aboriginal human remains also triggers notification requirements to the Commonwealth Minister for the Environment under section 20(1) of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth).

IMPORTANT!

All human skeletal remains are subject to statutory controls and protections.

All bones must be treated as potential human skeletal remains and work around them must stop while they are protected and investigated urgently.

However, where it is suspected that less than 100 years has elapsed since death, the human skeletal remains come under the jurisdiction of the State Coroner and the Coroners Act 2009 (NSW). Such a case would be considered a 'reportable death' and under legal notification obligations set out in section 35(2); a person must report the death to a police officer, a coroner or an assistant coroner as soon as possible. This applies to all human remains less than 100 years old⁸ regardless of ancestry (i.e. both Aboriginal and non-Aboriginal remains). Public health controls may also apply.

Guidance on what to do when suspected human remains are found is provided in Appendix 5.

5. Legislative Requirements

Table 1 identifies some of the relevant legislation/regulations for the protection of heritage and the management of unexpected heritage finds in NSW. It should be noted that significant

⁸ Under section 19 of the *Coroners Act 2009*, the coroner has no jurisdiction to conduct an inquest into reportable death unless it appears to the coroner that (or that there is reasonable cause to suspect that) the death or suspected death occurred within the last 100 years.

penalties exist for breaches of the listed legislation as a result of actions that relate to unauthorised impacts on heritage items. Further, it is noted that heritage that has been assessed and is being managed in accordance with relevant statutory approvals(s) is exempt from these offences.

To avoid breaches of legislation, it is important that Sydney Metro and its contractors are aware of their statutory obligations under relevant legislation and that appropriate control measures are in place to ensure that unexpected heritage items are appropriately managed during construction. Contractors/Alliances will need to ensure that they undertake their own due diligence to identify any other legislative requirements that may apply for a given project.

Table 1 Legislation and guidelines for management of unexpected heritage finds

Relevant Requirement	Objectives and offences
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Section 115ZB Giving of approval by Minister to carry out a project.
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Requires heritage to be considered within the environmental impact assessment of projects. This guideline is based on the premise that an appropriate level of Aboriginal and non-Aboriginal cultural heritage assessment and investigations and mitigation have already been undertaken under the relevant legislation, including the EP&A Act, during the assessment and determination process. It also assumes that appropriate mitigation measures have been included in the conditions of any approval.
<i>Heritage Act 1977 (Heritage Act)</i>	The Heritage Act provides for the care, protection and management of heritage items in NSW. Under section 139, it is an offence to disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed, unless the disturbance or excavation is carried out in accordance with an excavation permit issued by the Heritage Division of the OEH. Under the Act, a relic is defined as: <i>‘any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance.’</i> A person must notify the Heritage Division of OEH, if a person is aware or believes that they have discovered or located a relic (section 146). Penalties for offences under the Heritage Act can include six months imprisonment and/or a fine of up to \$1.1million.

Relevant Requirement	Objectives and offences
National Parks and Wildlife Act 1974 (NPW Act)	The NPW Act provides the basis for the care, protection and management of Aboriginal objects and places in NSW. An Aboriginal object is defined as: <i>‘any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains’.</i> An ‘Aboriginal place’ is an area declared by the Minister administering the Act to be of special significance with respect to Aboriginal culture. An Aboriginal place does not have to contain physical evidence of occupation (such as Aboriginal objects). Under section 87 of the Act, it is an offence to harm or desecrate an Aboriginal object or place. There are strict liability offences. An offence cannot be upheld where the harm or desecration was authorised by an AHIP and the permit’s conditions were not contravened. Defences and exemptions to the offence of harming an Aboriginal object or Aboriginal place are provided in section 87, 87A and 87B of the Act. A person must notify OEHL if a person is aware of the location of an Aboriginal object. Penalties for some of the offences can include two years imprisonment and/or up to \$550,000 (for individuals), and a maximum penalty of \$1.1 million (for corporations).

6. Unexpected heritage finds protocol

6.1. What is an unexpected heritage find?

An ‘unexpected heritage find’ can be defined as any unanticipated archaeological discovery that has not been identified during a previous assessment or is not covered by an existing permit under the Heritage Act. The find may have potential cultural heritage value, which may require some type of statutory cultural heritage permit or notification if any interference of the heritage item is proposed or anticipated.

The range of potential archaeological discoveries can include but are not limited to:

- remains of rail infrastructure including buildings, footings, stations, signal boxes, rail lines, bridges and culverts
- remains of other infrastructure including sandstone or brick buildings, wells, cisterns, drainage services, conduits, old kerbing and pavement, former road surfaces, timber and stone culverts, bridge footings and retaining walls
- artefact scatters including clustering of broken and complete bottles, glass, ceramics, animal bones and clay pipes
- Archaeological human skeletal remains.

6.2. Managing unexpected heritage finds

In the event that an unexpected heritage find (the find) is encountered on a Sydney Metro site, the flowchart in Figure 1 must be followed. There are eight steps in the procedure. These steps are summarised in Figure 1 and explained in detail in Table 2.

Figure 1 Overview of steps to be undertaken on the discovery of an unexpected heritage item

IMPORTANT!

Sydney Metro may have approval to impact on certain heritage items during construction. If you think that you may have discovered a heritage item and you are unsure whether an approval is in place or not, **STOP** works and follow this procedure.

Table 2 Specific tasks to be implemented following the discovery of an unexpected heritage item

Step	Task	Responsibility	Guidance and tools
1	Stop work, protect item and inform the Excavation Director		
1.1	Stop all work in the immediate area of the item and notify the Project Manager	Contractor/ Supervisor	Appendix 1 (Identifying Unexpected Heritage items)
1.2	Establish a 'no-go zone' around the item. Use high visibility fencing, where practical. No work is to be undertaken within this zone until further investigations are completed and, if required, appropriate approvals are obtained. Inform all site personnel about the no-go zone.	Project Manager/ Contractor/ Supervisor	
1.3	Inspect, document and photograph the item.	Archaeologist and or Excavation Director	Appendix 2 (Unexpected Heritage Item Recording Form) Appendix 3 (Photographing Unexpected Heritage items)
1.4	Is the item likely to be bone? If yes , follow the steps in Appendix 4 – 'Uncovering bones'. Where it is obvious that the bones are human remains, you must notify the local police by telephone immediately. They may take command of all or part of the site. Also refer to the Sydney Metro Exhumation Management Plan If no , proceed to next step.	Excavation Director	Appendix 4 (Uncovering Bones)

Step	Task	Responsibility	Guidance and tools
1.5	Inform the Excavation Director of the item and provide as much information as possible, including photos and completed form (Appendix 2). Where the project has a Sydney Metro Environmental Manager, the Environmental Manager should be involved in the tasks/process.	Contractors Project Manager	
1.6	Can the works avoid further disturbance to the item? Project Manager to confirm with Sydney Metro's Environment Manager. Complete the remaining tasks in Step 1.	Contractors Project Manager	
1.7	Excavation Director and Sydney Metro Environmental Manager to advise the Project Manager whether Sydney Metro has approval to impact on the 'item'. Does Sydney Metro have an approval or permit to impact on the item? If yes , work may recommence in accordance with that approval or permit. There is no further requirement to follow this procedure. If no , continue to next step.	Contractors Project Manager	
1.8	Has the 'find' been damaged or harmed? If yes , record the incident in the Incident Management System Implement any additional reporting requirements related to the planning approval and CEMP, where relevant.	Contractors Project Manager, Excavation Director	
2	Contact and engage an archaeologist and/or an Aboriginal heritage consultant		
2.1	If an archaeologist and/or Aboriginal heritage consultant has been previously appointed for the project, contact them to discuss the location and extent of the item and arrange a site inspection, if required. The project CEMP may contain contact details of the archaeologist/Aboriginal heritage consultant. Where there is no project archaeologist engaged for the works engage a suitably qualified consultant to assess the find: if the find is a non-Aboriginal deposit, engage a suitably qualified and experienced archaeological consultant if the find is likely to be an Aboriginal object, engage an Aboriginal heritage consultant to assess the find.	Contractors Project Manager, Excavation Director	
2.2	If requested, provide photographs of the item taken during Step 1.3 to the archaeologist or Aboriginal heritage consultant.	Contractors Project Manager, Excavation Director	Appendix 3 (Photographing Unexpected Heritage items)

Step	Task	Responsibility	Guidance and tools
3	Preliminary assessment and recording of the find		
3.1	In a minority of cases, the archaeologist/Aboriginal heritage consultant may determine from the photographs that no site inspection is required because no heritage constraint exists for the project (e.g. the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing (e.g. via email or letter with the consultant's name and company details clearly identifiable) to the Sydney Metro Project Manager.	Archaeologist/ Aboriginal heritage consultant/ Excavation Director	Proceed to Step 8
3.2	Arrange site access for the archaeologist/Aboriginal heritage consultant to inspect the item as soon as practicable. In the majority of cases a site inspection is required to conduct a preliminary assessment.	Contractors Project Manager, Excavation Director	
3.3	Subject to the archaeologist/Aboriginal heritage consultant's assessment, work may recommence at a set distance from the item. This is to protect any other archaeological material that may exist in the vicinity, which may have not yet been uncovered. Existing protective fencing established in Step 1.2 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.	Archaeologist/ Aboriginal heritage consultant Contractors Project Manager, Excavation Director	
3.4	The archaeologist/Aboriginal heritage consultant may provide advice after the site inspection and preliminary assessment that no heritage constraint exists for the project (e.g. the item is not a 'relic' or a 'heritage item' or an 'aboriginal item'. Any such advice should be provided in writing (e.g. via email or letter with the consultant's name and company details clearly identifiable) to the Metro Project Manager. Note that : a relic is evidence of past human activity which has local or State heritage significance. It may include items such as bottles, utensils, remnants of clothing, crockery, personal effects, tools, machinery and domestic or industrial refuse an Aboriginal object may include a shell midden, stone tools, bones, rock art or a scarred tree a "work", building or standing structure may include tram or train tracks, kerbing, historic road pavement, fences, sheds or building foundations.	Archaeologist/ Aboriginal heritage consultant/ Contractors Project Manager, Excavation Director	Proceed to Step 8 Refer to Appendix 1 (Identifying heritage items)

Step	Task	Responsibility	Guidance and tools
3.5	Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains). The archaeologist/Aboriginal heritage consultant can provide contacts for such specialist consultants.	Excavation Director Archaeologist	
3.6	Where the item has been identified as a 'relic' or 'heritage item' or an 'Aboriginal object' the archaeologist should formally record the item.	Archaeologist/ Aboriginal heritage consultant	
3.7	OEH (Heritage Division for non-Aboriginal relics and Planning and Aboriginal Heritage Section for Aboriginal objects) can be notified informally by telephone at this stage by the Sydney Metro Environmental Manager Any verbal conversations with regulators must be noted on the project file for future reference.	Contractors Project Manager, Excavation Director	
4	Section 4 not used		
5	Notify the regulator, if required.		
5.1	Based on the findings of the archaeological or heritage management plan and corresponding legislative requirements, is the find required to be notified to OEH and the Secretary? If no , proceed directly to Step 6 If yes , proceed to next step.	Sydney Metro Environmental Manager Excavation Director	
5.2	If notification is required, complete the template notification letter, including the archaeological/heritage management plan and other relevant supporting information and forward to the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) for signature.	Sydney Metro Environmental Manager Excavation Director	Appendix 6 (Template Notification Letter)
5.3	Forward the signed notification letter to OEH and the Secretary. Informal notification (via a phone call or email) to OEH prior to sending the letter is appropriate. The archaeological or heritage management plan and the completed site recording form (Appendix 2) must be submitted with the notification letter (for both Aboriginal objects and non-Aboriginal relics). For Part 5.1 projects, the Department of Planning and Environment must also be notified.		

Step	Task	Responsibility	Guidance and tools
5.4	A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form is to be kept on file and a copy sent to the Sydney Metro Project Manager.	Contractors Project Manager, Excavation Director	
6	Implement archaeological or heritage management plan		
6.1	Modify the archaeological or heritage management plan to take into account any additional advice resulting from notification and discussions with OEH.	Contractors Project Manager, Excavation Director	
6.2	Implement the archaeological or heritage management plan. Where impact is expected, this may include a formal assessment of significance and heritage impact assessment, preparation of excavation or recording methodologies, consultation with Registered Aboriginal Parties, obtaining heritage approvals etc., if required.	Contractors Project Manager, Excavation Director	
6.3	Where heritage approval is required contact the Sydney Metro Environment Manager for further advice and support material. Please note there are time constraints associated with heritage approval preparation and processing.	Contractors Project Manager, Excavation Director	
6.4	Assess whether heritage impact is consistent with the project approval or if project approval modification is required from the Department of Planning and Environment.	, Excavation Director/Sydney Metro Environmental Manager	
6.5	Where statutory approvals (or project approval modification) are required, impact upon relics and/or Aboriginal objects must not occur until heritage approvals are issued by the appropriate regulator.	Contractors Project Manager, Excavation Director	
6.6	Where statutory approval is not required but where recording is recommended by the archaeologist/Aboriginal heritage consultant, sufficient time must be allowed for this to occur.	Contractors Project Manager, Excavation Director	
6.7	Ensure short term and permanent storage locations are identified for archaeological material or other heritage material removed from site, where required. Interested third parties (e.g. museums, local Aboriginal land councils, or local councils) should be consulted on this issue. Contact the archaeologist or Aboriginal heritage consultant for advice on this matter, if required.	Contractors Project Manager, Excavation Director	
7	Section 7 Not Used		

Step	Task	Responsibility	Guidance and tools
8	Resume work		
8.1	Seek written clearance to resume project work from the project Excavation Director/Archaeologist/Aboriginal heritage consultant. Clearance would only be given once all archaeological excavation and/or heritage recommendations and approvals (where required) are complete. Resumption of project work must be in accordance with the all relevant project/heritage approvals/determinations.	Contractors Project Manager, Excavation Director	
8.2	If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies.	Contractors Project Manager, Excavation Director	
8.3	Deleted		
8.4	If additional unexpected items are discovered this procedure must begin again from Step 1.	All	

7. Responsibilities

Table 3 Roles and Responsibilities

Role	Responsibility or role under this guideline
Contractor / Supervisor	Stop work immediately when an unexpected heritage find is encountered. Cordon off area until Environmental Manager /Excavation Director advises that work can recommence.
Contractor or Environment Manager	Manage the process of identifying, protecting and mitigating impacts on the 'find'. Liaise with Sydney Metro Project Manager and Environment Manager and assist the archaeologist/Aboriginal heritage consultant with mitigation and regulatory requirements. Complete Incident Report and review CEMP for any changes required. Propose amendments to the CEMP if any changes are required.
Contractor's or Project Heritage Advisor or Consultant	Provide expert advice to the Sydney Metro Environment Manager on 'find' identification, significance, mitigation, legislative procedures and regulatory requirements.
Environmental Representative	Independent environmental advisor engaged by Sydney Metro Ensures compliance with relevant approvals (new and existing).
Heritage Division of OEH	Regulate the care, protection and management of relics (non-Aboriginal heritage). Delegated authority for Heritage Council Issue excavation permits.

Role	Responsibility or role under this guideline
Registered Aboriginal Parties (RAPs)	Aboriginal people who have registered with Sydney Metro to be consulted about a proposed project or activity in accordance with the OEH <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> .
Sydney Metro Environment Manager	Notify the Sydney Metro Principal Manager, Environmental Management of 'find' and manage Incident Reporting once completed by Environmental Manager.
Contractors Project Manager	Ensures all aspects of this procedure are implemented. Advise Contractor / Supervisor to recommence work if all applicable requirements have been satisfied and the Excavation Director /Project Archaeologist has approved recommend of work.

8. Seeking Advice

Advice on this procedure should be sought from the Sydney Metro Environment a Manager in the first instance. Contractors and alliance partners should ensure their own project environment managers are aware of and understand this procedure. Technical archaeological or heritage advice regarding an unexpected heritage item should be sought from a suitably qualified and experienced archaeologist/Aboriginal heritage consultant.

9. Related documents and references

- Environmental Incident Classification and Reporting – 9TP-PR-105
- Guide to Environmental Control Map – 3TP-SD-015
- NSW Heritage Office (1998), *Skeletal remains: guidelines for the management of human skeletal remains*.
- Roads and Maritime Services (2015), *Standard Management Procedure Unexpected Heritage Items*.
- Department of Environment and Conservation NSW (2006), *Manual for the identification of Aboriginal remains*.
- Sydney Metro Exhumation Management Plan

10. List of appendices

The following appendices are included to support this procedure:

- Appendix 1: Examples of finds encountered during construction works
- Appendix 2: Unexpected Heritage Item Recording Form
- Appendix 3: Photographing Unexpected Heritage Items
- Appendix 4: Uncovering Bones
- Appendix 5: Archaeological Advice Checklist
- Appendix 6: Template Notification Letter

11. Document history

Version	Date of approval	Notes
1.1		Incorporates ER comments 21/06/17
1.2		Amends p13 step 8 reference to s146 added
1.3		Incorporates Planning Mods 1-4 including amended CoA E20
1.4		Incorporates ER comments 21/03/18
2.0		Removes SSI 15-7400 COA reference

Appendix 1: Examples of finds encountered during construction works



Photo 1 - Aboriginal artefacts found at the Wickham Transport Interchange, 2015



Photo 2 – Aboriginal artefacts (shell material) found at the Wickham Transport Interchange, 2015



Photo 3 1840s seawall and 1880s retaining wall uncovered at Balmain East, 2016



Photo 4 Sandstone pavers uncovered at Balmain East, 2016



Photo 5 - Platform structure at Hamilton Railway Station classified as a 'work' by the project archaeologist - Wickham Transport Interchange project, 2015

Photo 6 - Platform structure at Hamilton Railway Station classified as a 'work' by the project archaeologist - Wickham Transport Interchange project, 2015



Photo 7 - Sandstone flagging and cesspit - Wynyard Walk project, 2014



Photo 8 - Chinese Ming Dynasty pottery and English porcelain/pottery dating back to early 19th century - Wynyard Walk project, 2014



Photo 9 - Pottery made by convict potter Thomas Ball during the early settlement - Wynyard Walk project, 2014

The following images, obtained from the Roads and Maritime Services' *Standard Management Procedure for Unexpected Heritage items 2015*, can be used to assist in the preliminary identification of potential unexpected items during construction and maintenance works.



Photo 10 - Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area) (RMS, 2015).

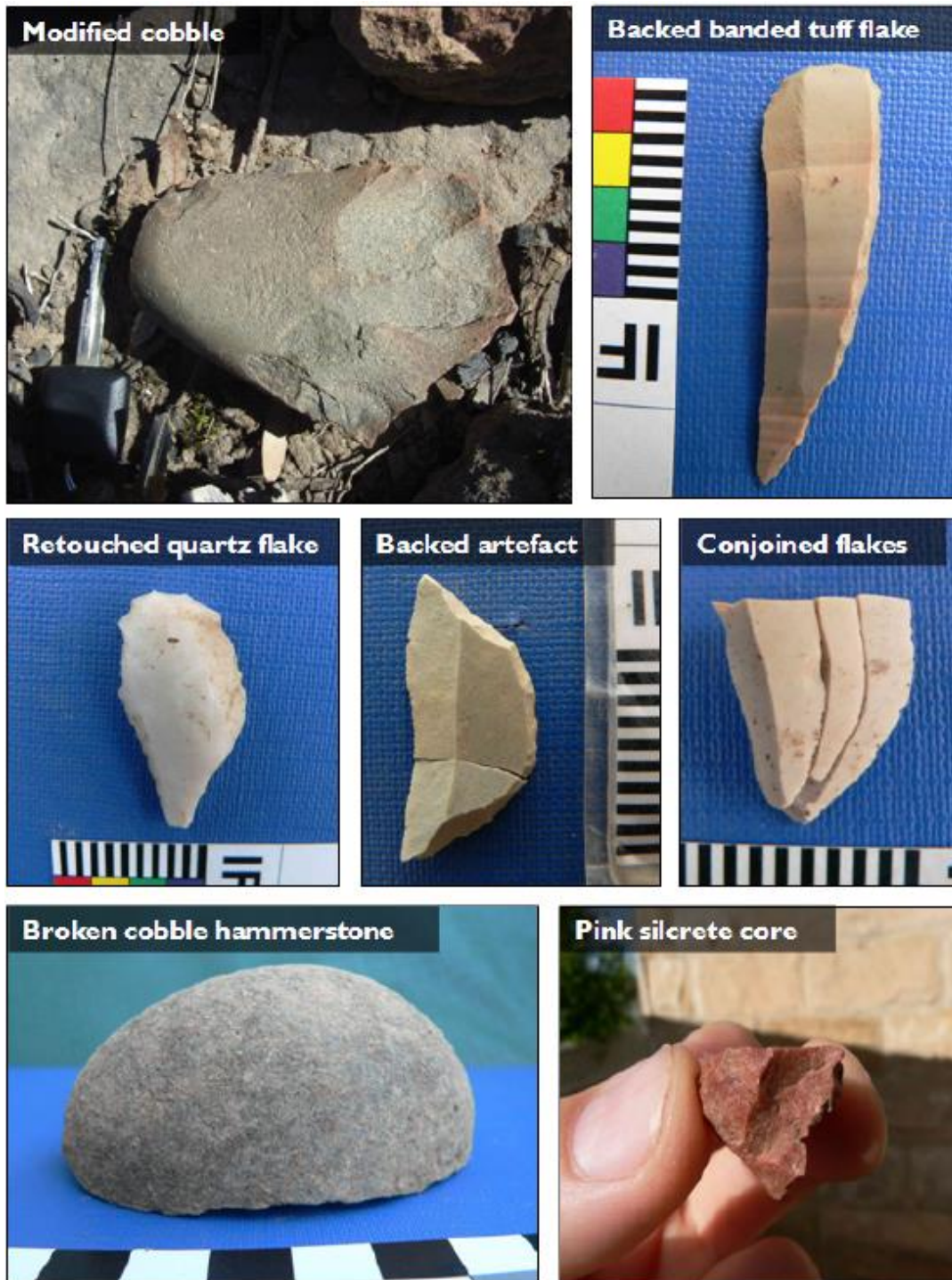


Photo 11 - Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area) (RMS, 2015).

Appendix 2 - Unexpected heritage item recording form

Example of unexpected heritage item recording form:

This form is to be completed Excavation Director on the discovery of an archaeological heritage item during construction or maintenance works

Date:		Recorded by: (include name and position)	
Project name:			
Description of works being undertaken:			
Description of exact location of item			
Description of item found (What type of item is it likely to be? Tick the relevant boxes).			
A. A relic	☐	A 'relic' is evidence of a past human activity relating to the settlement of NSW with local or state heritage significance. A relic might include bottle, utensils, plates, cups, household items, tools, implements, and similar items	
B. A 'work', building or structure'	☐	A 'work' can generally be defined as a form infrastructure such as track or rail tracks, timber sleepers, a culvert, road base, a bridge pier, kerbing, and similar items	
C. An Aboriginal object	☐	An 'Aboriginal object' may include stone tools, stone flakes, shell middens, rock art, scarred trees and human bones	
D. Bone	☐	Bones can either be human or animal remains. Remember that you must contact the local police immediately by telephone if you are certain that the bone(s) are human remains.	
E. Other	☐		
Provide a short description of the item (E.g. metal rail tracks running parallel to the rail corridor. Good condition. Tracks set in concrete, approximately 10 cm below the current ground surface).			

Sketch (Provide a sketch of the item's general location in relation to other road features so its approximate location can be mapped without having to re-excavate it. In addition, please include details of the location and direction of any photographs of the item taken)			
Action taken (Tick either A or B)			
A. Unexpected item would not be further impacts on by the works	☐	Describe how works would avoid impact on the item. (E.g. the rail tracks would be left in situ and recovered with paving).	
B. Unexpected item would be further impacted by the works	☐	Describe how works would impact on the item. (E.g. milling is required to be continued to a depth of 200 mm depth to ensure the pavement requirements are met. Rail tracks would need to be removed.)	
Excavation Director		Signature	
		Signature	

Important

It is a statutory offence to disturb Aboriginal objects and historic relics (including human remains) without an approval. All works affecting objects and relics must cease until an approval is sought.

Approvals may also be required to impact on certain works.

Appendix 3 - Photographing unexpected heritage items

Photographs of unexpected items in their current context (*in situ*) may assist archaeologists/Aboriginal heritage consultants to better identify the heritage values of the item. Emailing good quality photographs to specialists can allow for better quality and faster heritage advice. The key elements that must be captured in photographs of the item include its position, the item itself and any distinguishing features. All photographs must have a scale (ruler, scale bar, mobile phone, coin etc.) and a note describing the direction of the photograph.

Context and detailed photographs

It is important to take a general photograph (Figure 1) to convey the location and setting of the item. This will add value to the subsequent detailed photographs also required (Figure 2).

Removal of the item from its context (e.g. excavating from the ground) for photographic purposes is not permitted.

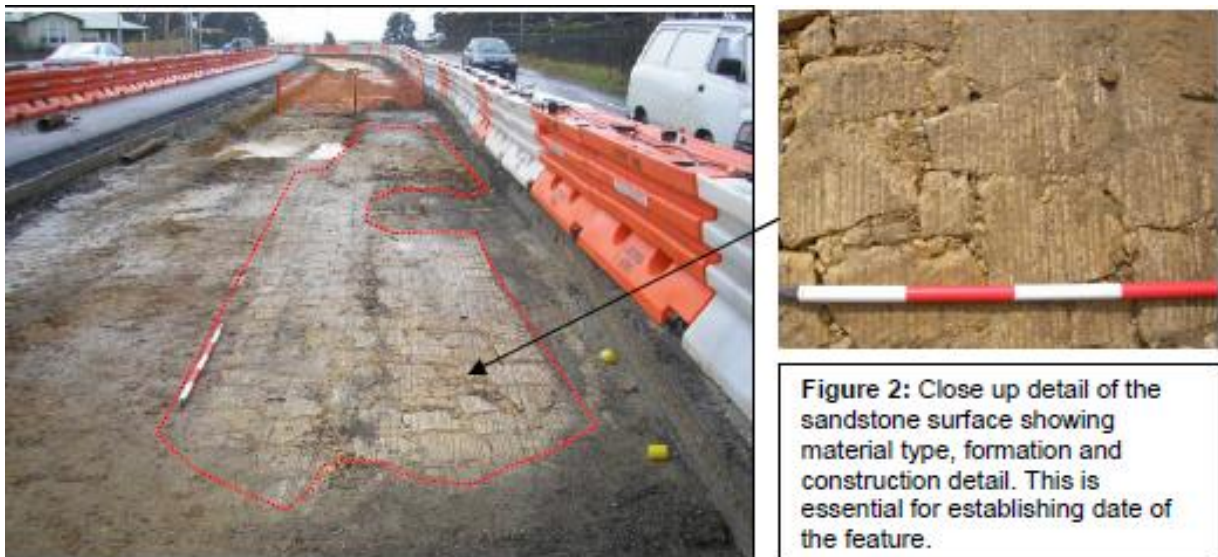


Figure 1: Telford road uncovered on the Great Western Highway (Leura) in 2008 (RMS, 2015).

Photographing distinguishing features

Where unexpected items have a distinguishing feature, close up detailed photographs must be taken of these features, where practicable. In the case of a building or bridge, this may include diagnostic details architectural or technical features. See Figures 3 and 4 for examples.



Figure 3: Ceramic bottle artefact with stamp.



Figure 4: Detail of the stamp allows 'Tooth & Co Limited' to be made out. This is helpful to a specialist in gauging the artefact's origin, manufacturing date and likely significance.

Photographing bones

The majority of bones found on site will those of be recently deceased animal bones often requiring no further assessment (unless they are in archaeological context). However, if bones are human, the police must be contacted immediately (see Appendix 6 for detailed guidance). Taking quality photographs of the bones can often resolve this issue quickly. The project archaeologist can confirm if bones are human or non-human if provided with appropriate photographs.

Ensure that photographs of bones are not concealed by foliage (Figure 5) as this makes it difficult to identify. Minor hand removal of foliage can be undertaken as long as disturbance of the bone does not occur. Excavation of the ground to remove bone(s) should not occur, nor should they be pulled out of the ground if partially exposed.

Where sediment (adhering to a bone found on the ground surface) conceals portions of a bone (Figure 6) ensure the photograph is taken of the bone (if any) that is not concealed by sediment.



Figure 5: Bone concealed by foliage.



Figure 6: Bone covered in sediment

Ensure that all close up photographs include the whole bone and then specific details of the bone (especially the ends of long bones, the *epiphysis*, which is critical for species identification). Figures 7 and 8 are examples of good photographs of bones that can easily

be identified from the photograph alone. They show sufficient detail of the complete bone and the epiphysis.



Figure 7: Photograph showing complete bone.



Figure 8: Close up of a long bone's epiphysis.

Appendix 4 - Uncovering bones

This appendix provides advice regarding:

- what to do on first discovering bones
- the range of human skeletal notification pathways
- additional considerations and requirements when managing the discovery of human remains.

1. First uncovering bones

Refer to the Sydney Metro Exhumation Management Plan

Stop all work in the vicinity of the find. All bones uncovered during project works should be **treated with care and urgency** as they have the potential to be human remains. The bones must be identified as either human or non-human as soon as possible by a qualified forensic or physical anthropologist.

On the very rare occasion where it is immediately obvious from the remains that they are human, the Project Manager (or a delegate) should **inform the police by telephone** prior to seeking specialist advice. It will be obvious that it is human skeletal remains where there is no doubt, as demonstrated by the example in Figure 1⁹. Often skeletal elements in isolation (such as a skull) can also clearly be identified as human. Note it may also be obvious that human remains have been uncovered when soft tissue and/or clothing are present.

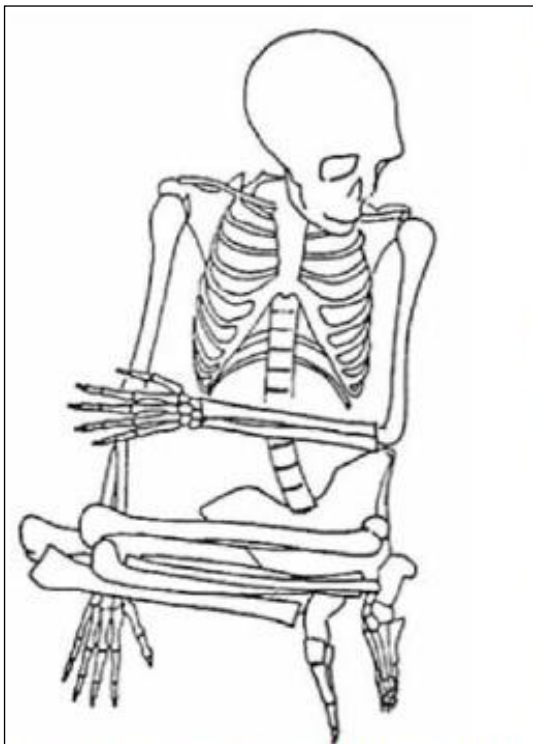


Figure 1: Schematic of a complete skeleton that is 'obviously' human¹².



Figure 2: Disarticulated bones that require assessment to determine species.

⁹ After Department of Environment and Conservation NSW (2006), *Manual for the identification of Aboriginal Remains*: 17

This preliminary phone call is to let the police know that a specialist skeletal assessment to determine the approximate date of death which will inform legal jurisdiction. The police may wish to take control of the site at this stage. If not, a forensic or physical anthropologist must be requested to make an on-site assessment of the skeletal remains.

Where it is not immediately obvious that the bones are human (in the majority of cases, illustrated by Figure 2), specialist assessment is required to establish the species of the bones. Photographs of the bones can assist this assessment if they are clear and taken in accordance with guidance provided in Appendix 3. Good photographs often result in the bones being identified by a specialist without requiring a site visit; noting they are nearly always non-human. In these cases, non-human skeletal remains must be treated like any other unexpected archaeological find.

If the bones are identified as human (either by photographs or an on-site inspection) a technical specialist must determine the likely ancestry (Aboriginal or non-Aboriginal) and burial context (archaeological or forensic). This assessment is required to identify the legal regulator of the human remains so **urgent notification** (as below) can occur.

Preliminary telephone or verbal notification by the archaeologist to the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) is appropriate. This must be followed up later by a formal letter notification to the relevant regulator when a management plan has been developed and agreed to by the relevant parties.

2. Range of human skeletal notification pathways

The following is a summary of the different notification pathways required for human skeletal remains depending on the preliminary skeletal assessment of ancestry and burial context.

A. Human bones are from a recently deceased person (less than 100 years old).

Action

A police officer must be notified immediately as per the obligations to report a death or suspected death under s35 of the *Coroners Act 2009* (NSW). It should be assumed the police will then take command of the site until otherwise directed.

B. Human bones are archaeological in nature (more than 100 years old) and are likely to be Aboriginal remains.

Action

The OEH (Planning and Aboriginal Heritage Section) must be notified immediately. The Aboriginal Cultural Heritage Advisor must contact and inform the relevant Aboriginal community stakeholders who may request to be present on site.

C. Human bones are archaeological in nature (more than 100 years old) and likely to be non-Aboriginal remains.

Action

The OEH (Heritage Division) must be notified immediately

Figure 3 summarises the notification pathways on finding bones.

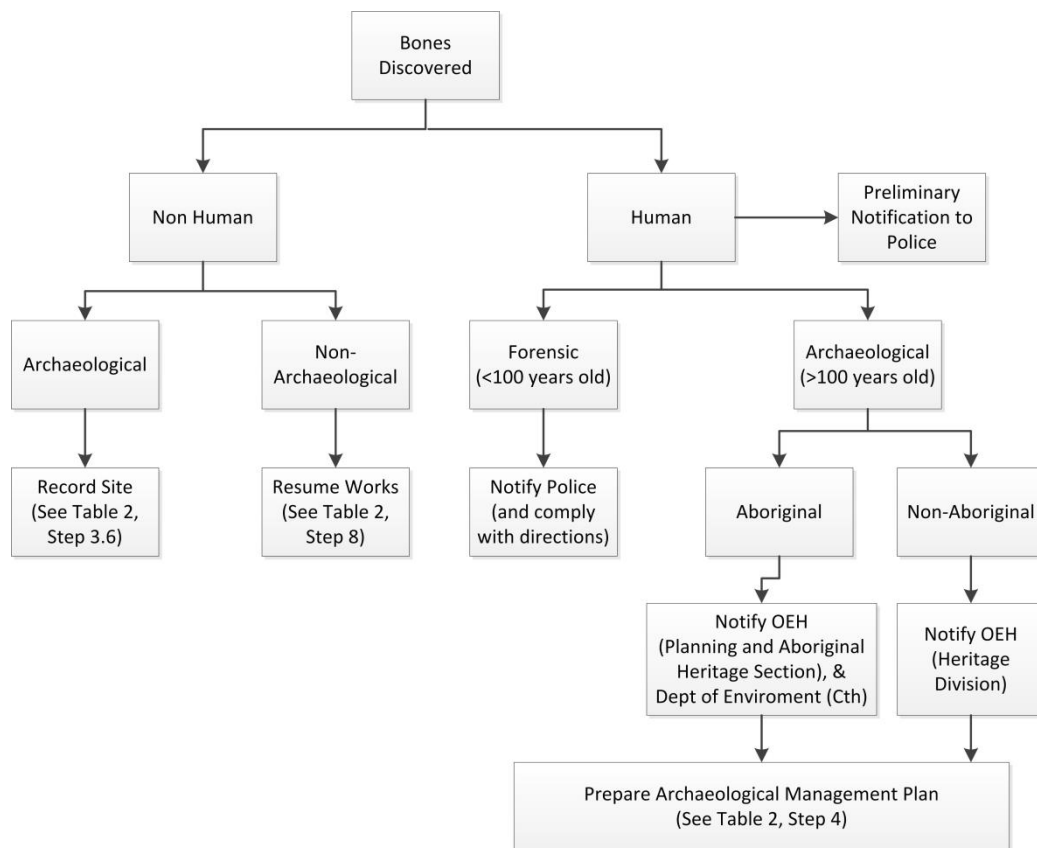


Figure 3 Overview of steps to be undertaken on the discovery of bones

After the appropriate verbal notifications (as described in 2B and 2C above), the Project Manager must proceed through the *Unexpected Heritage Items Exhumation Management Plan* (Step 4). It is noted that no *Exhumation Management Plan* is required for forensic cases (2A), as all future management is a police matter. Non-human skeletal remains must be treated like any other unexpected archaeological find and so must proceed to record the find as per Step 3.6.

3. Additional considerations and requirements

Uncovering archaeological human remains must be managed intensively and needs to consider a number of additional specific issues. These issues might include facilitating culturally appropriate processes when dealing with Aboriginal remains (such as repatriation and cultural ceremonies). Project Managers may need to consider overnight site security of any exposed remains and may need to manage the onsite attendance of a number of different external stakeholders during assessment and/or investigation of remains.

Project Managers may also be advised to liaise with local church/religious groups and the media to manage community issues arising from the find. Additional investigations may be required to identify living descendants, particularly if the remains are to be removed and relocated.

If exhumation of the remains (from a formal burial or a vault) is required, Project Managers should also be aware of additional approval requirements under the *Public Health Act 1991* (NSW). Specifically, Sydney Metro may be required to apply to the Director General of NSW

Department of Health for approval to exhume human remains as per Clause 26 of the *Public Health (Disposal of Bodies) Regulation 2002* (NSW)¹⁰.

Further, the exhumation of such remains needs to consider health risks such as infectious disease control, exhumation procedures and reburial approval and registration. Further guidance on this matter can be found at the NSW Department of Health website.

In addition, due to the potential significant statutory and common law controls and prohibitions associated with interfering with a public cemetery, project teams are advised, when works uncover human remains adjacent to cemeteries, to confirm the cemetery's exact boundaries.

¹⁰ This requirement is in addition to heritage approvals under the *Heritage Act 1977*.

Appendix 5 - Archaeological/heritage advice checklist

The archaeologist/Aboriginal heritage consultant must advise the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) of an appropriate archaeological or heritage management plan as soon as possible after an inspection of the site has been completed (see Step 4). An archaeological or heritage management plan can include a range of activities and processes, which differ depending on the find and its significance.

In discussions with the archaeologist/Aboriginal heritage consultant the following checklist can be used as a prompt to ensure all relevant heritage issues are considered when developing this plan. This will allow the project team to receive clear and full advice to move forward quickly. Archaeological and/or heritage advice on how to proceed can be received in a letter or email outlining all relevant archaeological and/or heritage issues.

	Required	Outcome/notes
Assessment and investigation		
• Assessment of significance	Yes/No	
• Assessment of heritage impact	Yes/No	
• Archaeological excavation	Yes/No	
• Archival photographic recording	Yes/No	
Heritage approvals and notifications		
• AHIP, section 140, section 139 exceptions etc.	Yes/No	
• Regulator relics/objects notification	Yes/No	
• Notification to Sydney Trains for s170 heritage conservation register	Yes/No	
• Compliance with CEMP or other project heritage approvals	Yes/No	
Stakeholder consultation		
• Aboriginal stakeholder consultation	Yes/No	
Artefact/heritage item management		
• Retention or conservation strategy (e.g. items may be subject to long conservation and interpretation)	Yes/No	
• Disposal strategy	Yes/No	
• Short term and permanent storage locations (interested third parties should be consulted on this issue).	Yes/No	
• Control Agreement for Aboriginal objects	Yes/No	

Appendix 6 - Template notification letter

Insert on TfNSW letterhead

Select and type date]

[Select and type reference number]

XXX

Manager, Conservation
Heritage Division, Office of Environment and Heritage
Locked Bag 5020
Parramatta NSW 2124

[Select and type salutation and name],

Re: Unexpected heritage item discovered during Sydney Metro activities.

I write to inform you of an unexpected [select: relic, heritage item or Aboriginal object] found during Sydney Infrastructure and Services construction works at [insert location] on [insert date] in accordance with the notification requirement under select: section 146 of the *Heritage Act 1977* (NSW). [Where the regulator has been informally notified at an earlier date by telephone, this should be referred to here].

NB: On finding Aboriginal human skeletal remains this letter must also be sent to the Commonwealth Minister for the Environment in accordance with notification requirements under section 20(1) of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Commonwealth).

[Provide a brief overview of the project background and project area. Provide a summary of the description and location of the item, including a map and image where possible. Also include how the project was assessed under the *Environmental Planning and Assessment Act 1979* (NSW) (e.g. Part 5). Also include any project approval number, if available].

Sydney Metro [or contractor] has sought professional archaeological advice regarding the item. A preliminary assessment indicates [provide a summary description and likely significance of the item]. Please find additional information on the site recording form attached.

Based on the preliminary findings, Sydney Metro [or contractor] is proposing [provide a summary of the proposed archaeological/heritage approach (e.g. develop archaeological research design (where relevant), seek heritage approvals, undertake archaeological investigation or conservation/interpretation strategy). Also include preliminary justification of such heritage impact with regard to project design constraints and delivery program].

The proposed approach will be further developed in consultation with a nominated Office of Environment and Heritage staff member.

Should you have any feedback on the proposed approach, or if you require any further information, please do not hesitate to contact [Environment and Planning Project Manager] on (02) XXXX XXXX.

Yours sincerely

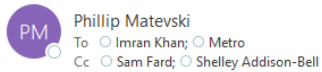
[Sender name]

Sydney Metro Principal Manager Sustainability Environment and Planning (Program) [Attach the archaeological/heritage management plan and site recording form]

APPENDIX E – Consultation Evidence

CBC – No comment

RE: Sydney Metro southwest EHVMT - CEMP Subplan consultation



Reply Reply All

This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message.

Sydney Metro EHVMT - Complaints Management.png .png File

Thank you for providing the below feedback from CBC's SMEs.

- Heritage Management Subplan (HMP) – please feel free to share the HMP with CBC's Aboriginal Liaison Officer. If you require any further action from our end, please let me know.
- Noise and Vibration Management Subplan (NVMP) – Shelley Addison-Bell is the Community Manager for the project, Shelley's contact details are below:

shelley.addison-bell@martinus.com.au
Shelley Addison-Bell
Stakeholder and Communications Manager

Mobile: +61 434 370 740
www.martinusrail.com.au



I have also attached our complaints management procedure that the project will adhere to.

If you require any further information or have any questions, please forward through to myself and Shelley and we will endeavour to respond as soon as we can.

Kind regards,

Phil Matevski | Environment and Sustainability Manager

M 0420 353 980 | W www.martinusrail.com.au



From: Imran Khan <Imran.Khan@cbcity.nsw.gov.au>
Sent: Monday, August 12, 2024 3:44 PM
To: Phillip Matevski <phillip.matevski@martinus.com.au>; Metro <metro@cbcity.nsw.gov.au>
Cc: Sam Fard <Samaneh.Fard@transport.nsw.gov.au>
Subject: RE: Sydney Metro southwest EHVMT - CEMP Subplan consultation

Hi Phillip,

The comments provided by council SME's :

- Sydney Metro southwest EHVMT - CEMP Subplan consultation** - Heritage Management sub-plan : No comment. NOTE: The report should however be referred to Council's Aboriginal Liaison Officer for review and comment (if not already done so) given there are Aboriginal management measures proposed.
- Sydney Metro southwest EHVMT - CEMP Subplan consultation - Noise and Vibration Management Sub-plan** : Provide council with details of the complaint management system and a direct contact in order for community concerns to be documented and forwarded onto the ARA for investigation and action.

Regards,

IWC – Martinus responses

From: Phillip Matevski <phillip.matevski@martinus.com.au>
Sent: Friday, 16 August 2024 9:13 PM
To: Martin Amy <Martin.Amy@innerwest.nsw.gov.au>
Cc: Tom Stanistreet <tom.stanistreet@innerwest.nsw.gov.au>; Conor Wilson <conor.wilson@innerwest.nsw.gov.au>; Minna Kilpelainen <minna.kilpelainen@innerwest.nsw.gov.au>
Subject: EXTERNAL/2024/0015 - RE: Sydney Metro Southwest - Inner West Council Comments

Dear Martin,

Please find our following responses to comments made to our several Sub-plans:

Noise and Vibration Management Plan

- While the developments are likely to have amenity impacts, the measures presented in Section 8 of the report will minimise the impacts to sensitive receivers.
Noted.
- In addition to the provided six-monthly Construction Monitoring Reports, we also request that a report outlining the complaints being received and the actions taken as a result be provided.
Martinus will provide a report summarising the complaints received and the actions taken as a result.

Waste and Recycling Management Plan

- Consideration is to be given to the waste management sections within each Development Control Plan (DCP) being Part 2.21 of the 2011 Marrickville DCP, Chapter C of the 2016 Comprehensive Inner West DCP, and Parts D, and E of the 2013 Leichhardt DCP.
Martinus will look to incorporate elements of the aforementioned DCPs into our WRMP where possible and feasible considering the nature and scope of works associated with the project.
- Maximising waste avoidance, reusing and recycling of materials is suggested, with targets in line with NSW best practice construction and demolition recovery and the NSW Waste and Sustainable Materials Strategy 2041. For example, the Paving the Way Program which aims to create end markets for materials that can be repurposed.
Martinus is aiming to maximise waste avoidance through the reusing and recycling of materials. Martinus is adhering to applicable Transport for New South Wales (TfNSW) Sustainable Design Guidelines (SDG) during the current design phase of the project.
- Managing waste and materials to avoid cross contamination is suggested, for example mulch contaminated with asbestos.
Martinus has a rigid and robust approach to hazardous materials management. This is found in our Construction Environmental Management Plan (CEMP) Appendix E – Unexpected Finds Procedure. Martinus will ensure clear delineation of any contaminated material encountered onsite, ensuring its appropriate storage and compliant disposal.

Heritage Management Plan

- Only an overview of works has been provided. Further information regarding the extent of the demolition, works, and exact locations of the works proposed would be required to fully assess the heritage impacts on Heritage Items and Heritage Conservation Areas within the Inner West Local Government Area.
The intention of the Heritage Management Plan is to outline how Martinus will manage heritage matters across the project. Heritage impacts were assessed as part of the SSI 8256 Environmental Impact Statement (EIS), with additional assessment carried out as design progresses to minimise impact and confirm the work is consistent with the approved project.
Martinus is currently drafting a Statement of Heritage Impact to compliment the Heritage Management Plan. As we approach finalised design for the project, the Statement of Heritage Impact will be completed accordingly. Once completed, Martinus are able to share the Statement of Heritage Impact with Inner West Council for information.
- Amending the report to be in accordance with the guidelines for assessing heritage significance by the NSW Heritage Office is suggested, identifying (a) historic significance, (b) historical association, (c) aesthetic/creative/technical achievement, (d) social, cultural, and spiritual, (e) research potential, (f) rare, and (g) representative.
Martinus will look to incorporate elements of *Assessing heritage significance - Guidelines for assessing places and objects against the Heritage Council of NSW criteria*, within the Statement of Heritage Impact that is currently being prepared.
- It is unclear the intent of the Unexpected Heritage Item criteria, as the Heritage items are not considered to be 'unexpected' as they are listed in LEP schedules, on the State Heritage Inventory, or on agency Section 170 registers.
The intent of the Unexpected Heritage Item criteria is to be implemented within areas where there is a higher likelihood of potentially finding unknown items of heritage significance.

Traffic and Transport Management Plan

- Please find attached Martinus' Traffic and Transport Management Plan for Inner West Council review and comment.**

Please let me know if Martinus can provide any further information to satisfy Inner West Council's feedback.

In the case the above responses are satisfactory, could you please confirm Inner West Council's acceptance of our responses.

Kind regards,

Phil Matevski | Environment and Sustainability Manager

Department of Planning, Housing & Infrastructure



Our Reference: SSI-8256-PA-431

Fill Cerone
Director of Sustainability, Environment and Planning
Sydney Metro

Attention: Sam Fard – Senior Manager Environment

10/10/2024

Subject: Sydney Metro, City & Southwest, Sydenham to Bankstown, Errant and Hostile Vehicle Mitigation Treatments – Construction Management Environmental Plan and Sub-plans.

Dear Mr Cerone

Thank you for submitting the Sydney Metro, City & Southwest, Sydenham to Bankstown Errant and Hostile Vehicle Mitigation Treatments (EHVMT) – Construction Environmental Management Plan and Sub-plans as outlined in Table 1 (the documents), on 30 August 2023. Thank you also for responding to the Department's requests for additional information.

I note the documents in Table 1 have been:

- prepared in consultation with the relevant stakeholders,
- reviewed by Sydney Metro and no issues have been raised with the Department, and
- endorsed by the project Environmental Representative.

Accordingly, as nominee of the Planning Secretary, I approve the documents listed in Table 1 under conditions C2 and C6 of SSI 8256. Further, I approve the monitoring programs incorporated into those documents under condition C11 of SSI 8256.

Table 1 – CEMP and Sub-plans

Document	Revision	Reference
Construction Environmental Management Plan (CEMP)	D	SSI-8256-PA-431
Heritage Management Plan (HMP)	C	SSI-8256-PA-433
Noise and Vibration Management Plan (NVMP)	C	SSI-8256-PA-432
Waste and Spoil Management Plan (WSMP)	B	SSI-8256-PA-434
Utility Management Strategy (UMS)	B	SSI-8256-PA-435

If there are any inconsistencies between the documents and the conditions of approval, the conditions prevail.

Please ensure you make the documents and this letter publicly available on the project website as soon as possible.

If you wish to discuss the matter further, please contact Lincoln De Haas at
Lincoln.dehaas@dpie.nsw.gov.au

Yours sincerely

Grant Brown
Acting Director
Infrastructure Management

As nominee of the Planning Secretary

