


Heritage Management Sub Plan



Project Name:	Sydney Metro West		
Client Name:	Sydney Metro		
Project Address:	Delta will demolish buildings across the following sites: 1. Parramatta 2. Clyde 3. Westmead		
Project Description/Scope:	Delta Pty Ltd (Delta) is responsible for the full structural demolition of existing structures including removal of all hazardous materials of the Sydney Metro West Demolition Project.		
Prepared By:	Name: [Redacted]	Signature: [Redacted]	[Redacted]
Reviewed By: (CEnvP No. 1389)	Name: [Redacted]	Signature: [Redacted] 	[Redacted]
Reviewed By: (GML Heritage)	Name: [Redacted]	[Redacted]	[Redacted]
Authorised By (Project Director):	Name: [Redacted]	Signature: [Redacted]	[Redacted]

Contents

1. AUTHORISATION AND CONTROL	4
1.1. Authorisation	4
1.2. Distribution	4
1.3. Revision.....	4
2. INTRODUCTION	5
2.1. Background and Purpose.....	5
2.2. Scope of the HMSP	5
2.3. Policy and Objectives.....	5
3. Project Description.....	5
3.1. Overall.....	5
3.2. Site establishment works (Phase C1)	6
3.3. Service disconnections and relocations (Phase C1)	6
3.4. Hazardous materials (HAZMAT) removal (Phase C1).....	7
3.5. Internal strip-out of structures (Phase C1)	7
3.6. Demolition of existing structures and site clearing (Phase C1)	7
3.7. Archaeological test excavation and related investigations (Phase C2).....	8
4. LEGAL AND OTHER REQUIREMENTS	8
4.1. Legislation	8
4.2. Guidelines and Other Documents.....	9
4.3. Minister’s Conditions of Approval	9
4.4. Sydney Metro Requirements	17
5. ROLES AND RESPONSIBILITIES.....	19
6. IMPLEMENTATION	22
6.1. Existing Environment	22
6.2. Control Measures	27
6.3. Archaeological Investigations	36
6.3.1. Parramatta Station Construction Site	36
6.3.2. Clyde.....	37
6.3.3. Westmead.....	38
6.3.4. Archaeological reporting.....	38
6.4. Heritage Management Measures by Location.....	38
6.4.1. Wetlands at Parramatta River, Camellia (and Ermington; Parramatta; and Rydalmere) Item no. I1	38
6.4.2. Victorian Regency terraced shops at 41-45 George Street, Parramatta	38
6.4.3. Kia Ora Georgian House at 64 Macquarie Street	38
6.4.4. The Roxy Theatre.....	39
6.4.5. Convict Drain.....	39
6.4.6. Horse Parapet Façade (and potential archaeological site)	40
6.4.7. RTA Depot (Clyde)	40
6.4.8. Westmead	41
6.5. Protection of Adjacent Heritage Buildings.....	41
6.6. Interpretation and Salvage	41
6.7. Unexpected Finds Procedure.....	42
6.7.1. Unexpected Finds	42
6.7.2. Notifiable Events	43
6.7.3. Environmental Incidents.....	43
6.8. Consultation.....	43
7. TRAINING	43

7.1. Site inductions	44
7.2. Management Plan Training.....	44
7.3. Toolbox Talks	44
8. MONITORING AND INSPECTION	44
8.1. Site Inspections.....	44
8.2. Condition Surveys of Heritage Sites.....	44
8.3. Monitoring Procedure	45
8.3.1. Noise and Vibration Monitoring.....	45
8.3.2. Vibration Screening Criteria	45
8.4. Site Audits.....	45
9. RECORDS AND REPORTING	46
9.1. Compliance Records	46
9.2. Reporting	46
9.2.1. Heritage Incident/Non-Compliance Report.....	46
9.2.2. Incident Register	46
9.2.3. Monthly Report	46
10. Appendices.....	47
A. Salvage Recommendations	48
B. Sydney Metro Unexpected Heritage Finds Procedure & Exhumation Management Procedure.....	52
C. Stakeholder responses.....	85
D. Environmental Policy	93
E. Clyde Site identifying RTA Depot	94
F. LOCATIONS OF EXCAVATION FOR SERVICE DISCONNECTION.....	95

1. AUTHORISATION AND CONTROL

1.1. Authorisation

This Plan is authorised by the Project Director. All project personnel are to ensure that their work activities and those of Project Consultants, Contractors and Suppliers are carried out in accordance with the requirements of this Plan.

1.2. Distribution

This Plan is a Controlled Document and must be distributed and revised under the guidance of the Project Manager. People who hold Controlled copies are responsible for ensuring their copies remain up to date.

1.3. Revision

The Project Director will monitor the implementation of this Plan and review the need for change or improvements having due regard to:

- Change in work scope, client comments etc.
- Internal and external audits
- Suggestions and comments from project personnel
- Incidence and frequency of non-conformance
- Necessity for corrective or preventative action
- Legal Update and Requirements
- Review by Delta Groups Management team
- Annual Review

All changes must be formally approved by the Project Director.

Changes to the recent revision will be highlighted.

The following table provides a record of amendments made to this document.

Rev	Date	Description	Page	Developed By	Approved By
a	13/08/2021	Draft – Issued for comment	All	[REDACTED]	[REDACTED]
0	25/08/2021	Issued for comment and consultation	All	[REDACTED]	[REDACTED]
1	16/10/2021	Updated to address stakeholder comments	All	[REDACTED]	[REDACTED]
2	03/11/2021	Updated to address HNSW comments	All	[REDACTED]	[REDACTED]
3	25/11/2021	Updated to address DPIE and ER Comments	All	[REDACTED]	[REDACTED]

<i>Distribution Register</i>			
Rev No.	Date of Issue	Name of Recipient	Position / Organisation
0	25/08/2021	[REDACTED]	Principals Representative / Sydney Metro
1	18/10/2021	[REDACTED]	Principals Representative / Sydney Metro
2	03/11/2021	[REDACTED]	Principals Representative / Sydney Metro
3	25/11/2021	[REDACTED]	Principals Representative / Sydney Metro

2. INTRODUCTION

2.1. Background and Purpose

Delta Pty Ltd. (Delta) has been engaged to carry out the demolition of buildings as described in **Section 33** below. The demolition of these buildings and structures is defined in this Heritage Management Sub Plan (HMSP) as “the Project”.

This HMSP has been prepared by Delta in compliance with:

- Requirement 3.4 a) of the Construction Environmental Management Framework (CEMF) which requires Principal Contractors to prepare Construction Environmental Management Plan (CEMP) including the issuing of specific sub plans; and
- The Minister for Planning and Environment’s Conditions of Approval (MCoA) for the demolition phase of the Sydney Metro West Project and to meet the requirements of Section 10 of the Sydney Metro Requirements – Environment (SMR E).

This HMSP provides specific management measures to ensure that Delta’s demolition works are carried out to manage the heritage components of the Project in a responsible and sensitive manner.

Implementing the HMSP effectively will ensure that the Project meets regulatory and contract requirements in a systematic manner and continually improves its performance.

2.2. Scope of the HMSP

This HMSP addresses heritage management associated with the Project. It covers all areas where physical works will occur and is applicable over the full duration of the Project.

All Delta staff and subcontractors are required to comply fully with the requirements of this HMSP.

The plan forms part of the project management documentation that has been prepared in accordance with the requirements of the Contract. The Project will be guided by Delta’s Integrated Management System (IMS). Delta’s IMS is certified as meeting the requirements of:

- AS/NZS45001 Occupational Health and Safety Management Systems;
- ISO14001 Environmental management; and
- ISO9001 Quality Management Systems.

2.3. Policy and Objectives

Delta’s Environmental Policy firmly establishes Delta’s aims of minimising its environmental impact and furthering sustainability in all of its operations. Delta’s Environmental Policy is attached in **Appendix D**.

Delta’s heritage objectives for the Project are provided part of Section 9.1(a) of SM Particular Specification. The heritage objectives are:

- Minimise impacts on items or places of heritage value;
- Avoid accidental impacts on heritage items; and
- Maximise worker’s awareness of Aboriginal and Non-Aboriginal heritage.

Delta is also committed to comply with the conditions of MCoA; CEMF and Sydney Metro for heritage requirements.

3. Project Description

3.1. Overall

The Sydney Metro West project is a new 24-kilometre metro line with stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street in the Sydney CBD (see **Figure 1**).

In order to enable the next phase of the overall Sydney Metro West Project, the Principal requires the demolition of all structures, and clearance of all vegetation (with the exception of riparian vegetation at Clyde) within three sites located in Clyde, Parramatta and Westmead.

Delta will be delivering the Parramatta, Clyde, and Westmead Enabling Works package (Phase C1), and the archaeological testing at Parramatta and Clyde (Phase C2). This package of works is generally broken down into the following stages including; site establishment works, service disconnections and relocations, hazardous materials (HAZMAT) removal, internal strip-out of structures, demolition of existing structures and site clearing. These stages of

works will apply to each of the sites. The archaeological testing at Parramatta and Clyde (Phase C2) will be staged as the study areas become available.

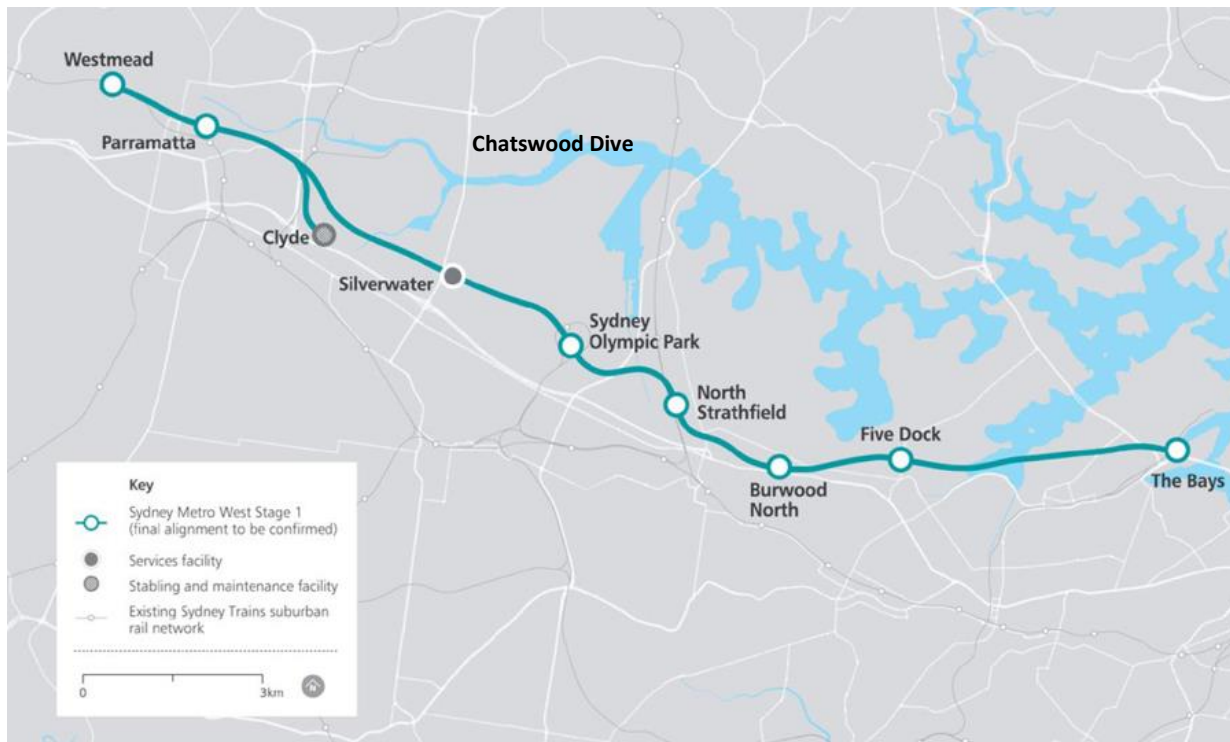


Figure 1 Sydney Metro West project

Source: Sydney Metro.

3.2. Site establishment works (Phase C1)

Site establishment works are required to facilitate the overall works and are generally considered to be relatively low impact works. These activities will generally be undertaken in accordance with the Sydney Metro West Low Impact Works approval pathway in accordance with MCoA A21 or under an approved Site Establishment Management Plan (SEMP) in accordance with MCoA A19. Any SEMP must be submitted to the Planning Secretary for approval one (1) month before the establishment of any ancillary facilities. Once the CEMP and relevant Sub Plans approved, any outstanding site establishment works will be managed in accordance with the project CEMP and relevant sub plans.

Site establishment works will generally include:

- Initial site investigations (e.g., specialist consultant inspections or surveys);
- Establishing perimeter security (e.g., installation of hoarding, fencing and boundary screening);
- Establishing environmental controls (e.g., erosion and sediment controls, and bat roosting boxes (if required));
- Salvaging any potential items identified by the Principal that may have heritage value; and
- Installation of site amenities and associated infrastructure (e.g., site sheds).

Note that in accordance with MCoA 21, the use of an ancillary facility for construction must not commence until the CEMP required by Condition C1 of this schedule, relevant CEMP Sub-plans required by Condition C5 of this schedule and relevant Construction Monitoring Programs required by Condition C14 of this schedule have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable). Also noting that the requirement of Condition 21 does not apply to Condition A21 of this schedule or where the use of an ancillary facility is Low Impact Work or for Low Impact Work. In addition, Delta will be undertaking the Parramatta and Clyde archaeological investigative works (Phase C2).

3.3. Service disconnections and relocations (Phase C1)

Each site has a number of services that require disconnection and/or relocation in order to facilitate the safe demolition of structures and future phases of work on the site. Access to all utilities and properties will be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier. Service disconnection and/or relocation includes:

Service disconnection generally includes:

- Service location, generally using non-destructive techniques where appropriate;
- Accessing services via existing structures or via targeted excavation;
- Disconnecting relevant service in accordance with relevant requirements and approvals;

Relocating services generally includes:

- Service location, generally using non-destructive techniques where appropriate;
- Installing services via existing structures or via targeted excavation; and
- Connecting relevant service in accordance with relevant requirements and approvals;

3.4. Hazardous materials (HAZMAT) removal (Phase C1)

Due to the age of various structures to be demolished, there are number of sites that have been identified to contain hazardous materials such as asbestos, lead paint and dust. This material identified through target surveys and will be safely removed by appropriately licensed removalists prior to undertaking the strip-out or demolition.

Hazardous materials removal works will generally include:

- Accessing the site;
- Establishing appropriate controls and exclusion zones for the hazard;
- Licensed removalist will use relevant tools to safely undertake the strip-out;
- Waste is managed and disposed to an appropriately licensed facility; and
- Validation of removal works by an appropriately qualified professional (e.g., Licensed Asbestos Assessor)

3.5. Internal strip-out of structures (Phase C1)

To allow safe structural demolition, Delta will perform an internal strip-out of internal materials. This would include items such as; office furniture and internal fixtures and linings.

Internal strip-out works will generally include:

- Accessing the site;
- Using appropriate tools and machinery to remove items;
- Managing waste and recycling; and
- Making safe for the final demolition work.

3.6. Demolition of existing structures and site clearing (Phase C1)

Delta has been engaged to undertake the demolition of all structures within the nominated sites down to slab level. Structural demolition works will generally include:

- Use of mechanical demolition methods e.g. Using Excavators with hydraulic attachments to demolish buildings.
 - Demolition will predominantly by completed top-down methodologies;
 - Mechanical demolition will be used either working from the slab on ground reaching up to the height of structure; or
 - Mechanical demolition with excavators working on top of the structure progressively demolishing level by level.
- Managing waste and recycling; and
- Making safe for handover.
- Using appropriate tools and machinery to demolish items;
- Managing waste and recycling; and
- Making safe for handover.

External site clearing of vegetation will be undertaken during demolition and/or concurrently with other stages of the works. Site clearing will generally include:

- Use of available machinery to remove vegetation;

- Use of an arborist to remove trees where there is a safety or ecological requirement (e.g., where there is potential to damage neighbouring buildings or structures to be retained or where an ecologist has noted it is as a requirement);
- Manage the waste; and
- Pre and Post Clearing inspections and reporting.

3.7. Archaeological test excavation and related investigations (Phase C2)

Archaeological test excavation and related investigations are required at the Parramatta and Clyde sites as identified in the Aboriginal Cultural Heritage Assessment Report of the EIS Stage 1. Delta will facilitate the excavation and spoil management requirements of the archaeological investigation. The archaeological investigation works will be undertaken by a Heritage specialist in accordance with the Archaeological Research Design and Excavation Methodology (ARDEM) 2021 and AHR 2021.

The investigation works will generally include:

- Test excavation;
- Salvage excavation;
- Archaeological monitoring if localised or shallow excavations are proposed in areas of potential and are not expected to impact significant archaeology; and
- Review for opportunities for conservation/relocation/interpretation of state significant archaeology to salvage.

Further details associated with the investigation works are found in **Section 6.3**.

4. LEGAL AND OTHER REQUIREMENTS

4.1. Legislation

The key environmental legislative requirement applicable to the heritage aspects of the Project are documented in Table 1. Table 1 shows the key NSW and Commonwealth environmental legislative requirements and their application to SM demolition works, current as at the date of this document. Delta regularly reviews its legislative requirements in accordance with its Integrated Management System (IMS).

Table 1 Relevant legislation

Legislation and Administering Authority	Relevant requirement	Application to Heritage aspects of Delta's demolition scope
key NSW environmental legislative requirements		
<i>Environmental Planning and Assessment Act 1979</i> Department of Planning and Environment (DPI&E)	Encourages proper environmental impact assessment and management of development areas for the purpose of promoting the social and economic welfare of the community and a better environment.	Adhere to mitigation measures and conditions within the planning approval documentation. The proponent and their contractors must endeavour to deliver in a consistent manner within the assessed scope of works.
<i>Heritage Act 1977</i> NSW Department of Premier and Cabinet	The Act aims to encourage the conservation of the State's heritage and provides for the identification and listing of items of State heritage significance. The Heritage Council must be notified 'of the location of relics unless it is believed on reasonable grounds that the Heritage Council is aware of the location of the relic'.	Projects assessed under Part 5, Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act) are exempt from approvals required under Part 4 and permits required under section 139.
<i>National Parks and Wildlife Act 1974</i> Heritage NSW	The objectives of the Act are for the conservation of nature and the conservation of objects, places or features (including biological diversity) of cultural value within the landscape.	Projects assessed under Part 5, Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act) are exempt from obtaining an Aboriginal Heritage Impact Permit required under section 90.
<i>Biodiversity Conservation Act 2016</i>	The relevant purpose of the Act is to conserve biodiversity and maintain the diversity and quality of ecosystems.	Projects assessed under Part 5, Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act) are exempt from an

Legislation and Administering Authority	Relevant requirement	Application to Heritage aspects of Delta's demolition scope
		order or direction under Part 11 of the Act. The Act also established that other permits and approvals are not required for projects assessed and determined under Part 5, Division 5.2 of the EP&A Act.
Key Commonwealth environmental legislative requirements		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> Department of the Environment	The relevant objective of the Act is to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance.	A project may be defined as a controlled action under the Act due to impacts on matters of national environmental significance. If an approval under the Environment Protection and Biodiversity Conservation Act is required for the project, Sydney Metro Principal Contractors must comply with any relevant conditions of the approval.

4.2. Guidelines and Other Documents

Guidelines, specifications, and policies relevant to heritage include:

- NSW Health Policy Directive, Exhumation of human remains (December 2013);
- Stabilising Stuff: A Guide for Conserving Archaeological Finds in the Field (Heritage Council of NSW 2012);
- Criteria for Assessment of Excavation Directors (Heritage Council of NSW 2011);
- Photographic Recording of Heritage Items using Film or Digital Capture (NSW Heritage Office 2006);
- Historical Archaeology Code of Practice (NSW Heritage Office 2006);
- Assessing Heritage Significance, NSW Heritage Manual (Heritage Council of NSW 2002);
- Statements of Heritage Impact, NSW Heritage Manual (Heritage Council of NSW 2002);
- Guidelines for Management of Human Skeletal Remains (NSW Heritage Office 1998);
- How to Prepare Archival Recording of Heritage Items (NSW Heritage Office 1998); and
- The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Australia ICOMOS 2013).

Project documents relevant to heritage include:

- Parramatta Station Construction Site Revised Archaeological Research Design and Excavation Methodology (GML 2021) (referred to as the ARDEM 2021);
- Parramatta Station Construction Site Aboriginal Heritage Report (GML 2021) (referred to as the AHR 2021);
- Clyde Aboriginal Heritage Work Method Statement (GML 2021) (referred to as the Clyde WMS 2021);
- Sydney Metro West Stage 1 Aboriginal Cultural Heritage Assessment Report (Artefact 2020) (referred to as the ACHAR 2020);
- Sydney Metro Unexpected Heritage Finds Procedure (Sydney Metro 2021); and
- Sydney Metro Exhumation Management Plan (Sydney Metro 2021).

4.3. Minister's Conditions of Approval

Delta notes that the Project must be carried out generally in accordance with the description provided in the EIS as amended by the Response to Submissions Report and the Conditions of Approval (MCoA). The relevant MCoA addressed by this HMSP are:

Table 2 Relevant MCoA and Revised Environmental Mitigation Measures (REMMs)

Reference	Relevant requirement	Where addressed
MCoA A6	Where the conditions of this approval require a document or monitoring program to be prepared, or a review to be undertaken, in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;	Appendix C

Reference	Relevant requirement	Where addressed						
	(b) a log of the dates of engagement or attempted engagement with the identified party and a summary of the issues raised by them; (c) documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that the party(s) has none or has failed to provide feedback after repeated requests; (d) outline of the issues raised by the identified party(s) and how they have been addressed; and (e) a description of the outstanding issues raised by the identified party(s) and the reasons why they have not been addressed.							
MCOA A43	The Planning Secretary must be notified via phone or in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. Any notification via phone must be followed up by a notification in writing via the Major Projects website within 24 hours of the initial phone call. The written notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and general nature of the incident.	The Principal Contractor will provide all information and documentation required by Sydney Metro						
MCoA A44	Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix A.	The Principal Contractor will provide all information and documentation required by Sydney Metro						
MCoA A45	The Planning Secretary must be notified in writing via the Major Projects website within seven (7) days after the Proponent becomes aware of any non-compliance with the conditions of this approval	The Principal Contractor will provide all information and documentation required by Sydney Metro						
MCoA A46	A non-compliance notification must identify the CSSI (including the application number for it), set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be undertaken to address the non-compliance. Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	The Principal Contractor will provide all information and documentation required by Sydney Metro						
MCoA C5 (d)	Of the CEMP Sub-plans required under Condition C1 of this schedule, the following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. Details of issues raised by a government agency during consultation must be included in the relevant CEMP Sub-plan, including copies of all correspondence from those government agencies as required by Condition A6 of this schedule. Where a government agency (ies) request(s) is not included, the Proponent must provide the Planning Secretary / ER (whichever is applicable) justification as to why: <table border="1" data-bbox="391 1317 1117 1512"> <thead> <tr> <th></th> <th>Required CEMP Sub-plan</th> <th>Relevant government agencies to be consulted for each CEMP Sub-plan</th> </tr> </thead> <tbody> <tr> <td>(d)</td> <td>Heritage (Non-Aboriginal and Aboriginal)</td> <td>Heritage NSW, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s)</td> </tr> </tbody> </table>		Required CEMP Sub-plan	Relevant government agencies to be consulted for each CEMP Sub-plan	(d)	Heritage (Non-Aboriginal and Aboriginal)	Heritage NSW, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s)	This Plan Section 6.8
	Required CEMP Sub-plan	Relevant government agencies to be consulted for each CEMP Sub-plan						
(d)	Heritage (Non-Aboriginal and Aboriginal)	Heritage NSW, SOPA (in respect of Sydney Olympic Park), Place Management NSW (in respect of The Bays) and Relevant Council(s)						
MCOA C6	The CEMP Sub-plans must state how: (a) the environmental performance outcomes identified in the documents listed in Condition A1 of this schedule will be achieved; (b) the mitigation measures identified in the documents listed in Condition A1 of this schedule will be implemented; (c) the relevant conditions of this approval will be complied with; and (d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles.	Refer to Section 2, Section 6, Section 7 and Section 8 Table 5						
MCOA C10	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable), unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary or endorsed by the ER (whichever is applicable), including any minor amendments approved by the ER, must be implemented for the duration of construction. Where construction of Stage 1 of the CSSI is phased, construction of a phase must not commence until the CEMP and	Refer to Section 5 of the CEMP						

Reference	Relevant requirement	Where addressed
	CEMP Sub-plans for that phase have been approved by the Planning Secretary or certified by the ER upon nomination by the Planning Secretary (whichever is applicable).	
MCoA C13	<p>In addition to the relevant requirements of the CEMF, the Heritage CEMP Sub-plan must include, but not be limited to:</p> <p>(a) be prepared in consultation with a suitably qualified and experienced heritage expert; and</p> <p>(b) identify exclusion zones, archival recording requirements, baseline and periodic monitoring protocols (including before and during construction);</p> <p>(c) identify and assess the heritage significance of the ancillary structures proposed to be demolished or significantly impacted that are within the curtilage of White Bay Power Station and other items identified as retaining 'potential heritage significance' in the documents listed in Condition A1 of this schedule and which will be impacted by the CSSI; 02</p> <p>(d) in association with Condition D61 of this schedule, set out the final site inspections to be conducted within three (3) months of completion of construction for the following heritage sites unless otherwise agreed by the Planning Secretary:</p> <p>(i) the Roxy Theatre (SHR I00711);</p> <p>(ii) White Bay Power Station (SHR I01015);</p> <p>(iii) the former State Abattoirs (State Environmental Planning Policy (State Significant Precincts) 2005 Item 141); and</p> <p>(iv) the RTA Depot facade fronting Unwin Street (Parramatta Local Environmental Plan 2011 I576); and</p> <p>(e) set out means of rectification of any damage by the CSSI to Heritage items (d)(i) to (d)(iv) above within six (6) months of the completion of construction at the construction site identified in the relevant Heritage CEMP Sub-plan. This rectification work must be in consultation with a suitably qualified and experienced heritage consultant to ensure the use of appropriate materials, appropriate conservation practices and in accordance with existing heritage management documents (for example, conservation management plans or strategies) to protect and conserve the heritage significance of the items.</p> <p>The Heritage CEMP Sub-plan must include Aboriginal cultural heritage management and mitigation measures (that may include conservation, archaeological salvage excavation and community collection) based on the Aboriginal Cultural Heritage Excavation Report and continuing Aboriginal community consultation.</p>	<p>This subplan has been prepared in consultation with GML Heritage:</p> <ul style="list-style-type: none"> - Don Wallace (Built Heritage Expert) - Waled Shehata (Built Heritage Consultant) - Abi Cryerhall (approved Excavation Director) <p>Section 6.5</p> <p>Section 6.4</p> <p>Section 8</p> <p>Section (c) White Bay Power Station not applicable Section d (ii), (iii) not applicable.</p> <p>Refer 6.4.4 for rectification provision for damage to The Roxy.</p> <p>Refer 6.4.7 for rectification provision for damage to RTA Depot (Clyde).</p>
MCoA D13	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Condition A1 of this schedule. Unexpected heritage finds identified by Stage 1 of the CSSI must be managed in accordance with the Unexpected Finds Protocol outlined in Conditions D31 to D33 of this schedule. Consideration of avoidance and redesign to protect state significant unexpected finds must be addressed where this condition applies.	<p>Section 6.6</p> <p>Section 6.7</p> <p>Appendix A</p>
MCoA D14	Before installing protective site boundary hoarding or equipment used for vibration and noise monitoring at any Heritage item identified in the documents listed in Condition A1 of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. The installation must also consider and avoid impacts to potential historical archaeology and seek advice from the Excavation Director approved under Condition D27 below.	Compliance with directions provided by Heritage Expert who will be engaged by Delta
MCoA D15	Before commencement of any excavation at the Parramatta metro station construction site, a detailed investigation must be undertaken to precisely locate the Parramatta Convict Drain. All options available to retain the Parramatta Convict Drain in situ must be considered. If retention of any part of the Parramatta Convict Drain located in situ is not feasible, the Proponent must satisfactorily demonstrate to the Planning Secretary why its removal is appropriate. If it is not feasible to retain the Parramatta Convict Drain in situ, archival recording must be undertaken on the affected section of the item in accordance with Heritage Council of NSW guidelines.	Procedure for physical archaeological investigation of the convict drain and impact design review in the ARDEM 2021 will be followed. Sydney Metro responsible for design review.
MCoA D16	During construction, the Proponent must implement protective measures to prevent adverse impacts on the heritage significance of the Victorian Regency terraced shops at 41-45 George Street, Parramatta and Kia Ora Georgian House at 64 Macquarie Street, Parramatta . Before installing such	Compliance with directions provided by Heritage Expert (GML) who will be engaged by Delta.

Reference	Relevant requirement	Where addressed
	measures, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item. Protection measures must also consider and avoid potential impacts to significant historical archaeology and seek the advice from the Excavation Director approved under Condition D27 below.	Section 6.4
MCoA D17	The Roxy Theatre , White Bay Power Station, the former State Abattoirs and the former RTA Depot facade fronting Unwin Street , must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in Condition A1 of this schedule.	Section 6.4.4 and 6.4.7 White Bay Power Station and the former State Abattoirs not applicable
MCoA D18	Where Heritage items, or items assessed to be of local heritage significance in the documents listed in Condition A1 of this schedule, are proposed to be fully or partially destroyed, heritage salvage must occur in consultation with a suitably qualified heritage specialist. The Proponent must develop a salvaged materials and moveable heritage register. The register must identify significant items to be salvaged. Salvage must occur where significance is retained and / or the potential for re-use, reinstatement or re-sale has been identified. The salvage from any State- listed items must be undertaken in consultation with Heritage NSW.	A suitably qualified Heritage Specialist will be engaged to advise on the removal, transport and storage of items removed for salvage. Section 6.6 Appendix A
MCoA D19	All reasonable steps must be taken not to harm, modify or otherwise impact Aboriginal objects except as authorised by this approval.	Section 6.7 Unexpected Finds.
MCoA D20	The Registered Aboriginal Parties (RAPs) must be kept informed about Stage 1 of the CSSI. The RAPs must continue to be provided with the opportunity to be consulted about the Aboriginal cultural heritage management requirements of Stage 1 of the CSSI.	Sydney Metro will facilitate Aboriginal Focus Groups to coordinate consultation with RAPs
MCoA D21	Aboriginal archaeological test excavation must be undertaken at those areas identified in Table 25 of the revised Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by Artefact Heritage and dated November 2020.	Phase C: For procurement and lead time reasons, Sydney Metro engaged GML Heritage to produce the Parramatta ARDEM. Delta Group will take over the engagement of GML for the test excavation works in Parramatta. Sydney Metro engaged City Plan for Archival Recording of Parramatta properties. Any heritage salvage work would be the responsibility of Delta Group. Phase C2: Sydney Metro asked Delta Group to include the Phase C2 works at Clyde within the HMP. GML have developed a localised ARD for the Phase C2 test excavation area. Delta Group will engage GML for the test excavation and salvage activities in Phase C2.
MCoA D22	An Aboriginal Archaeological Test Excavation Methodology(s) must be prepared and appropriately integrated with the revised Archaeological Research Design and Excavation Methodology. The Aboriginal Archaeological Salvage Excavation Methodology(s) must be prepared after analysis of the test excavation results.	The Aboriginal Heritage Report includes the excavation methodology in section 5 which is referred to in sections 5 and 6 of the ARDEM. The Aboriginal Heritage Report has been prepared by GML Heritage and finalised in consultation with the Registered Aboriginal Parties. A copy can be provided to DPIE for information upon request.

Reference	Relevant requirement	Where addressed
		<p>Phase C: For procurement and lead time reasons, Sydney Metro engaged GML Heritage to produce the Parramatta ARDEM. Delta Group will take over the engagement of GML for the test excavation works in Parramatta. Sydney Metro engaged City Plan for Archival Recording of Parramatta properties. Any heritage salvage work would be the responsibility of Delta Group.</p> <p>Phase C2: Sydney Metro asked Delta Group to include the Phase C2 works at Clyde within the HMP. GML will develop a localised ARD for the Phase C2 test excavation area. Delta Group will engage GML for the test excavation and salvage activities in Phase C2.</p>
MCoA D23	<p>At the completion of Aboriginal cultural heritage test and salvage excavations, an Aboriginal Cultural Heritage Excavation Report(s), prepared by a suitably qualified expert, must be prepared in accordance with the Guide to Investigation, assessing and reporting on Aboriginal cultural heritage in NSW, OEH 2011 and the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, DECCW 2010. The Aboriginal Cultural Heritage Excavation Report(s) must document the results of the archaeological test excavations and any subsequent salvage excavations. The RAPs must be given a minimum of 28 days to consider the report and provide comments before the report is finalised. The final report must be provided to Heritage NSW within 24 months of the completion of the Aboriginal archaeological excavations (both test and salvage).</p>	<p>An Aboriginal Cultural heritage Excavation Report will be developed and submitted to the appropriate parties under this condition at the conclusion of Phases C and C2. This Aboriginal Cultural heritage Excavation Report would be relevant to the activities undertaken under Phases C and C2 only. Future Aboriginal Cultural heritage Excavation Reports would be developed for future Sydney Metro Phases at Parramatta (Phase F).</p>
MCoA D24	<p>Where previously unidentified Aboriginal objects are discovered, all work must immediately stop in the vicinity of the affected area and a suitably qualified and experienced Aboriginal heritage expert must be contacted to provide specialist heritage advice, before construction recommences. The measures to consider and manage this process must be specified in the Heritage CEMP Sub-plan required by Condition C5 of this schedule and, where relevant, include registration in the Aboriginal Heritage Information Management System (AHIMS).</p>	<p>Compliance with directions provided by Heritage Expert (GML) that will be engaged by Delta</p>
MCoA D25	<p>Before the commencement of any work at Parramatta and The Bays metro station construction sites, a revised Archaeological Research Design and Excavation Methodology(s) must be prepared in accordance with Heritage Council of NSW guidelines and with reference to the detailed design of Stage 1 construction of the CSSI to guide archaeological excavation. The revised Archaeological Research Design and Excavation Methodology(s) must be prepared by the Excavation Director (approved under Condition D27 below) and must include:</p> <ul style="list-style-type: none"> (a) site specific research for the Parramatta and The Bays metro station construction sites which is conducted by a professional historian to clearly articulate the historical development of the allotments to assist with the reassessment of potential and significance; (b) comparative analysis from archaeological investigations in Parramatta (including theses, publications and grey literature reports); 	<p>Sydney Metro will prepare the revised Archaeological Research Design and Excavation Methodology(s)</p>

Reference	Relevant requirement	Where addressed
	<p>(c) preparation of research questions based on the additional site-specific research required by this condition, and relevant research agendas from previously excavated early historical occupation in Parramatta including recovered artefact assemblages; and</p> <p>(d) a reconsideration of archaeological methods to manage the sites based on this additional assessment.</p> <p>The revised Archaeological Research Design and Excavation Methodology(s) must apply to both Parramatta and The Bays metro station construction sites and be prepared in consultation with Heritage NSW and Place Management NSW (in respect of The Bays) and submitted to the Planning Secretary for approval.</p> <p>The revised Archaeological Research Design and Excavation Methodology(s) must be implemented throughout the archaeological excavation programs.</p> <p>Note: Nothing in these conditions prevents the Archaeological Research Design and Excavation Methodology to be separate procedures</p>	
MCoA D26	<p>The revised Archaeological Research Design and Excavation Methodology(s) must include provision for early physical investigation of areas of impact identified as likely to contain State significant archaeology or subterranean Heritage items in the research design to inform excavation in these areas. This must include the Parramatta and The Bays metro station sites, including Parramatta Convict Drain, Parramatta Sand Body, White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel.</p>	<p>Sydney Metro will prepare the revised Archaeological Research Design and Excavation Methodology(s) Relevant requirements from the final Design will be incorporated into this Plan.</p>
MCoA D27	<p>Before commencement of archaeological excavation, the Proponent must nominate a suitably qualified Excavation Director, who complies with Heritage Council of NSW's Criteria for Assessment of Excavation Director (September 2019), to oversee and advise on matters associated with historical archaeology for the approval of the Planning Secretary, in consultation with Heritage NSW. The Excavation Director must be present to oversee excavation, advise on archaeological issues, advise on the duration and extent of oversight required during archaeological excavations consistent with the approved Archaeological Research Design and Excavation Methodology(s) required under Condition D25 of this schedule. Aboriginal archaeological excavations must be conducted by a suitably qualified person in accordance with the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010). More than one Excavation Director may be engaged for Stage 1 of the CSSI to exercise the functions required under the conditions of this approval.</p>	<p>Delta will engage with the Principal's nominated archaeological consultant GML to undertake all services required.</p> <p>Sydney Metro will make all submissions to the Planning Secretary and nominate an Excavation Director.</p> <p>The approved Excavation Directors are: Abi Cryerhall (Primary ED Historical Archaeology) Sophie Jennings (Secondary ED Historical Archaeology) Dr Tim Owen (Aboriginal Archaeology)</p>
MCoA D28	<p>Following completion of archaeological excavation programs, a Final Excavation Report and an Aboriginal Cultural Heritage Excavation Report must be prepared that includes further detailed and site-specific historical research undertaken to enhance the final reporting, and results of archaeological excavations. The report must include details of any significant artefacts recovered (salvaged), where they are located and details of their ongoing conservation. The Final Excavation Report must document significant results and artefacts which may be re-used in future stages of the CSSI. The Final Excavation Report must be prepared in accordance with guidelines and standards required by Heritage Council of NSW.</p>	<p>A Final Excavation Report/ Aboriginal Cultural heritage Excavation Report will be developed and submitted to the appropriate parties under this condition at the conclusion of Phases C and C2. This Aboriginal Cultural heritage Excavation Report would be relevant to the activities undertaken under Phases C and C2 only. Future Final Excavation Reports/ Aboriginal Cultural heritage Excavation Reports would be developed for future Sydney Metro Phases at Parramatta (Phase F).</p>
MCoA D29	<p>The Final Excavation Report and Aboriginal Cultural Heritage Excavation Report must be submitted to the Planning Secretary, Heritage NSW and the Relevant Council for information no later than 24 months after the completion of the archaeological excavation.</p>	<p>Sydney Metro would lodge all submissions under this condition and interface with DPIE, Heritage NSW and Relevant Council.</p>

Reference	Relevant requirement	Where addressed
MCoA D30	<p>In the event the CSSI salvages state significant historical archaeology associated with early convict occupation at the Parramatta metro station construction site for which retention and future conservation is not possible:</p> <p>(a) the key findings of the archaeological investigations must be documented which explain their significance within the context of Parramatta and NSW no later than two (2) years after the completion of the archaeological excavations; and</p> <p>(b) provide for the curation, display and public access of artefacts, site records and final reports.</p> <p>Note: In reference to (b) above, this may involve partnerships with museums, local heritage centres and/or universities.</p>	Sydney Metro would lodge all submissions under this condition and interface with DPIE, Heritage NSW and Relevant Council.
MCoA D31	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds (heritage items and values) in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW.	Section 6.6 Unexpected Finds Procedure
MCoA D32	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 (with respect to non-Aboriginal cultural heritage) and in relation to Aboriginal cultural heritage, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010) and submitted to the Planning Secretary for information no later than one (1) month before the commencement of construction.	Section 6.6 Unexpected Finds Procedure
MCoA D33	<p>The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of construction.</p> <p>Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately. Management of human remains in NSW is subject to requirements set out in the Public Health Act 2010 (NSW) and Public Health Regulation 2012 (NSW). Nothing in these conditions prevents separate procedures for the Unexpected Heritage Finds and Human Remains Procedure.</p>	Section 6.6 Unexpected Finds Procedure
MCoA D47	The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring at Heritage items.	<p>Compliance with directions provided by Heritage Expert who will be engaged by Delta.</p> <p>Sections 6.5</p>
MCoA D48	Before conducting at-property treatment at any Heritage item identified in the documents listed in Condition A1 of this schedule, the advice of a suitably qualified and experienced built heritage expert must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.	<p>Compliance with directions provided by Heritage Expert who will be engaged by Delta.</p> <p>Section 6.5.</p>
MCoA D49	If a Heritage item is found to be structurally unsound (following inspection) a more conservative cosmetic damage criterion of 2.5 mm/s peak component particle velocity (from DIN 4150) must be applied.	<p>Section 8.3.2</p> <p>Noise and Vibrations Sub Management Plan Compliance with assessments provided by Heritage Expert that will be engaged by Delta.</p> <p>Refer NAH2 for determination of PPV thresholds in consultation with the nominated built heritage expert and historic structures engineer.</p>

Reference	Relevant requirement	Where addressed
REMM NV16	Where vibration levels are predicted to exceed the screening criteria, a more detailed assessment of the structure (in consultation with a structural engineer) and vibration monitoring would be carried out to ensure vibration levels remain below appropriate limits for that structure. For heritage items, the more detailed assessment would specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed.	Refer section 8.3 for determination of PPV thresholds in consultation with the nominated built heritage expert and historic structures engineer.
REMM NV17	Condition surveys of buildings and structures near to the tunnel and excavations would be undertaken prior to the commencement of excavation at each site, where appropriate. For heritage buildings and structures the surveys would consider the heritage values of the structure in consultation with a heritage specialist.	Section 8.2, and Section 4.8 of the CEMP
REMM NAH1	Archival recording and reporting of the following heritage items 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): <ul style="list-style-type: none"> • Shops (and potential archaeological site)(Parramatta LEP Item No. I703) • Kia Ora (and potential archaeological site) (Parramatta LEP Item No. I716) • RTA Depot (Parramatta LEP Item No. I576) • State Abattoirs (SEPP Listing No. A) • White Bay Power Station (SHR Listing No. Q1015) 	Not applicable Archival recording completed by Sydney Metro
REMM NAH2	A method for the demolition of existing buildings and/or structures at specified construction sites would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.	Section 6.5
REMM NAH3	Prior to commencement of demolition of heritage elements at White Bay Power Station within The Bays construction site, significant heritage fabric would be identified for salvage and reuse opportunities for salvaged fabric considered.	Not applicable
REMM NAH4	The policies of the White Bay Power Station Conservation Management Plan would be considered in regard to visual impacts of the Stage 1 works, particularly the acoustic shed (or other acoustic measures) and any temporary structures. Significant view lines would be retained during Stage 1 works.	Not applicable
REMM NAH5	Where heritage items, including significant archaeology are impacted by Stage 1 works, consideration would be given to their inclusion in the Heritage Interpretation Plan for future stages.	Not Applicable, except that Delta will provide relevant information to Sydney Metro Refer to Section 6.6
REMM NAH6	The archaeological research design would be implemented. Significant archaeological findings would be considered for inclusion in heritage implementation (as per NAH5) for the project and be developed in consultation with the relevant local council.	The ARDEM 2021 will be implemented – refer to Section 6.3. Not Applicable, except that Delta will provide relevant information to Sydney Metro Refer to Section 6.6
REMM NAH7	An Archaeological Excavation Report would be prepared by the Excavation Director and be provided to the NSW Heritage Division within two years of the completion of archaeological excavations specified in the archaeological research design(s).	Refer to Section 6.3.4 Sydney Metro will submit archaeological reports to Heritage NSW.
REMM NAH8	In the event that State significant archaeology associated with early convict occupation is located at Parramatta metro station: <ul style="list-style-type: none"> • In situ conservation would be considered. If in situ conservation is not feasible and reasonable, a strategy to mitigate impacts would be prepared in consultation with the NSW Heritage Council (or delegate) • An Archaeological Method Statement would be prepared in consultation with the NSW Heritage Council (or delegate) for management of the archaeological remains, whether for conservation or archaeological investigation and recording • An accessible publication would be prepared within two years of archaeological excavations to document the archaeological investigations • Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities. 	Refer to Section 6.3 for implementation of ARDEM 2021 Sydney Metro will consider conservation opportunities, accessible publication of archaeological results, and provide artefact curation.
REMM	REMM deleted	Not applicable

Reference	Relevant requirement	Where addressed
NAH9		
REMM NAH10	<p>n assessment of significance would be prepared in consultation with the relevant local council for the following potential unlisted heritage items:</p> <ul style="list-style-type: none"> • 220 Church Street, Parramatta • 48 Macquarie Street, Parramatta • Pine Inn at 19 Parramatta Road, Concord • 338-340 Parramatta Road, Burwood • Former warehouse shed, Glebe Island. <p>If the assessment of significance confirms these items have local heritage value, an archival recording would be undertaken.</p>	Not Applicable, assessments completed by Sydney Metro
REMM AH1	Aboriginal stakeholder consultation would be carried out in accordance with the Heritage NSW, Department of Premier and Cabinet's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).	Sydney Metro is responsible for the Aboriginal Focus Group for project. Refer to Section 6.3 for Aboriginal engagement during archaeological works
REMM AH2	Archaeological test excavation (and salvage when required) would be carried out where intact natural profiles with the potential to contain significant archaeological deposits are encountered at the specified construction sites and the Parramatta power supply route. Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report.	Section 6.3
REMM AH3	If Aboriginal archaeological remains are recovered during Stage 1, results would be incorporated into Aboriginal heritage interpretation for the Concept in consultation with registered Aboriginal parties.	Not Applicable, except that Delta will provide relevant information to Sydney Metro Refer to Section 6.6
REMM AH4	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Sydney Metro Exhumation Management Plan would be implemented.	Appendix B

4.4. Sydney Metro Requirements

Sydney Metro Requirements for heritage are provided within SMR E and the CEMF. The relevant requirements addressed by this HMSP are:

Table 3 Relevant Sydney Metro Requirements

SMR E	Relevant requirement	Where addressed
SM-W-PCE-PS		
SM-W-PCE-PS-85	Subject to a direction by the Principal under clause 7.10 of the contract, and with appropriate heritage advice, the careful removal (without damage) of any building materials identified as having heritage significance (e.g. movable heritage, skirting boards, ceiling roses, etc.), in accordance with a salvage register and in accordance with the Project Planning Approval;	Section 6.6 Interpretation and Salvage
SM-W-PCE-PS-86	The updating and maintenance of the salvage register	Section 9.2 Reporting. Sydney Metro to maintain Register.
SM-W-PCE-PS-87	The transport and delivery of the items to a location advised by the Principal's Representative (within the Sydney metropolitan area). The methods used for removal must be submitted to the Principal for Review.	Section 6.6 Interpretation and Salvage
SM-W-PCE-PS-408	The Contractor must not use any heritage listed structure within the Site as a site facility or for the storage of any materials unless otherwise agreed by the Principal at its absolute discretion.	Section 6.2
CEMF		
CEMF 9.1 (a)	<p>The following heritage management objectives will apply to construction:</p> <ol style="list-style-type: none"> Consider heritage values in any architectural design, education or physical interpretation; Minimise impacts on items or places of heritage value; Avoid accidental impacts on heritage items; and 	Section 2.3 Delta Heritage Objectives

SMR E	Relevant requirement	Where addressed
	iv. Maximise worker's awareness of Aboriginal and Non-Aboriginal heritage.	
CEMF 9.2 (a)	Principal Contractors will develop and implement a Heritage Management Plan which will include as a minimum:	
	i. Evidence of and processes for consultation with Registered Aboriginal Parties and the NSW Heritage Council;	Section 6.8 Consultation
	ii. Identification of all heritage buildings and structures, to guide the assessment, retention, protection, conservation, salvage and reuse of heritage elements throughout the work;	Section 6.1 Existing Environment
	iii. Identification of initiatives that will be implemented to enhance heritage values and minimize heritage impacts, including procedures and processes that will be used to implement and document heritage management initiatives;	Section 6.2
	iv. The Heritage Management Plan must be prepared in accordance with the relevant conditions of the Planning Approval and the Construction Environmental Management Framework, and set out how the Contractor will evidence the achievement of these requirements	Section 4.
	v. The responsibilities of key project personnel with respect to the implementation of the plan;	Section 5 Roles and Responsibilities
	vi. Both the methodology and critical stages within the Contractor's Activities for the identification, assessment, retention, protection, conservation, interpretation, salvage and reuse of heritage elements	Section 6.6 Interpretation and Salvage
	vii. Procedures for interpretation of heritage items uncovered through salvage or excavation during detailed design;	Section 6.6 Interpretation and Salvage
	viii. Procedures for the investigation of archaeological relics, objects and/ or sites (where relevant), prior to works commencing that would affect them;	Section 6.6 Interpretation and Salvage
	ix. Details for the short and / or long term management of objects, archaeological artefacts and/or movable heritage;	Section 6.6 Interpretation and Salvage
	x. archaeological management plans for both Aboriginal and non-Aboriginal archaeology	To be developed by Principals nominated archaeological consultant
	xi. 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 6.6 Interpretation and Salvage
	xii. Procedures for unexpected heritage finds, including procedures for dealing with human remains consistent with the Sydney Metro procedures;	Section 6.7 Unexpected Finds
	xiii. Heritage monitoring requirements;	Section 8.3 Monitoring Procedure
xiv. Compliance record generation and management.	Section 9.2 Compliance Records	
CEMF 9.2 (b)	The Contractor's regular inspections will include checking of heritage mitigation measures.	Section 8.1 Site Inspections
CEMF 9.2 (c)	Compliance records will be retained by the Contractor. These will include:	
	i. Inspections undertaken in relation to heritage management measures;	Section 9.1 Compliance Records
	ii. Updated salvage registers	
	iii. Archival recordings undertaken of any heritage item;	
	iv. Unexpected finds and stop work orders; and	
	v. Records of any impacts avoided or minimised through design or construction methods.	

5. ROLES AND RESPONSIBILITIES

Table 4 below provides the key roles and responsibilities under the HMSP.

Table 4 Key Roles and Responsibilities

Project Role	Responsibilities
Project Director	<ul style="list-style-type: none"> • Primary contact with the Principal's Representative on all aspects of the Project. • Approve and ensure implementation of this HMSP. • Approve monthly reports and issue to the Principal.
Project Manager	<ul style="list-style-type: none"> • Implement the HMSP. • Lead by example. • Immediately notify the Nominated Representative in the event of an unexpected find. • Identify heritage management opportunities and support those identified by others. • Organise on-site personnel with regard to their responsibilities within the HMSP. • Carry out periodic audits of the incident response process. • Manage non-conformances and initiate corrective action as required. • Review reports, and follow up on recommendations.
Demolition Site Manager	<ul style="list-style-type: none"> • Implement the HMSP. • Lead by example. • Immediately shut down the works in the event of an unexpected find. • In the absence of the Project Manager, immediately notify the Nominated Representative in the event of an unexpected find • Provide advice and assistance on the HMSP to employees. • Identify heritage management opportunities and support those identified by others. • Decide when training is required. • Undertaking inspection of the contracted or planned works to ensure that HMSP measures are implemented and effective. • Carry out weekly toolbox talks. • Manage the Site Folder and ensure all HMSP requirements are compiled.
Environment and Sustainability Manager	<ul style="list-style-type: none"> • Maintain the HMSP. • Update the HMSP as required. • Lead by example. • Ensure relevant information from the HMSP is incorporated into project inductions. • Prepare monthly reports and submit to the Project Director. • Identify heritage management opportunities and support those identified by others. • Communicate the requirements of the HMSP and ensure these are addressed. • Ensure subcontractor documentation captures the requirements of the HMSP. • Conduct audits and inspections of the site. • Participate in Principal-led site audits. • Attend toolbox meetings and inductions. • Ensure that heritage management defects are identified, actioned and closed out. • Attend on-site meetings to ensure heritage is raised for review.
Environmental Representative	<p>From commencement of construction until completion of construction, the approved ER must:</p> <p>(a) Receive and respond to communications from the Secretary in relation to the environmental performance of the CSSI;</p> <p>(b) Consider and inform the Secretary on matters specified in the terms of this approval;</p> <p>(c) Consider and recommend any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;</p> <p>(d) Review all documents required to be prepared under the terms of this approval, ensure they address any requirements in or under this approval and if so, endorse them before submission to the Secretary (if required to be submitted to the Secretary) or before implementation (if not required to be submitted to the Secretary);</p>

Project Role	Responsibilities
	<p>(e) Regularly monitor the implementation of all documents required by the terms of this approval for implementation in accordance with what is stated in the document and the terms of this approval;</p> <p>(f) Notify the Secretary of an incident in accordance with Condition A41 of this approval;</p> <p>(g) As may be requested by the Secretary, help plan, attend or undertake Department audits of the CSSI, briefings, and site visits;</p> <p>(h) If conflict arises between the Proponent and the community in relation to the environmental performance of the CSSI, follow the procedure in the Community Communication Strategy approved under Condition B3 of this approval to attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary;</p> <p>(i) Review any draft consistency assessment that may be carried out by the Proponent, and provide advice on any additional mitigation measures required to minimise the impact of the work;</p> <p>(j) Consider any minor amendments to be made to the CEMP, CEMP sub-plans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP sub-plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;</p> <p>(k) Assess the impacts of minor ancillary facilities as required by Condition A18 of this approval; and</p> <p>(l) Prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly Environmental Representative Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month (or other timeframe agreed with the Secretary). The Environmental Representative Report must be submitted within seven (7) days following the end of each month for the duration of works and construction of the CSSI, or as otherwise agreed with the Secretary.</p> <p>The Environmental Representative will interface with the Environment and Sustainability Manager or delegate during ER site inspections and in addressing ER correspondence or enquiries. The Environment and Sustainability Manager or delegate will seek the endorsement of the ER for management plans, consistency assessments, and minor amendments to be made to the CEMP and its Sub Plans.</p>
<p>Built Heritage Expert</p>	<ul style="list-style-type: none"> • Contribute to management of heritage items part of the CEMP; • Consult in preparation of the CEMP Sub-plans to ensure it is capturing the requirements and recommendations for heritage; • Set out means of rectification of any damage by the CSSI to Heritage items to ensure the use of appropriate materials, appropriate conservation practices and in accordance with existing heritage management documents (for example, conservation management plans or strategies) to protect and conserve the heritage significance of the items; • Advise possible impacts on the heritage significance of the items identified in the documents listed in Condition A1 before installing protective site boundary hoarding or equipment used for vibration and noise monitoring; • Advise possible impacts on the heritage significance of the items identified in the documents listed in Condition A1 during construction; • Advise on monitoring and managing sensitive heritage fabric, consider the heritage values of the structure where vibration levels are predicted to exceed the screening criteria (in consultation with a structural engineer); • Consult on the heritage values of heritage structures part of Condition Surveys of buildings near to the tunnel and excavations taken prior to the commencement of excavation at each site; • Coordinate with the Archaeology Excavation Directors for matters affecting archaeology;

Project Role	Responsibilities
	<ul style="list-style-type: none"> • Prepare Archival recording and reporting of the required heritage items 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).
Historic Structures Engineer	<ul style="list-style-type: none"> • With Built Heritage Expert, advise on protective and monitoring measures to retained heritage structures and demolition nearby.
Acoustic Advisor	<ul style="list-style-type: none"> • Consult with Built Heritage Expert and Historic Structures Engineer on protective and monitoring measures to retained heritage structures and demolition nearby.
Excavation Director (Archaeology)	<ul style="list-style-type: none"> • Excavation Directors are approved under Condition D27 <ul style="list-style-type: none"> - Historical archaeology Excavation Directors meet the requirements of the Heritage Council of NSW Criteria for Assessment of Excavation Directors (September 2009) and additional requirements of Condition D27 - Aboriginal archaeology Excavation Directors meet the requirements of the Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales (DECCW 2020) • Prepare the Archaeological Research Design and Excavation Methodology (ARDEM) required under Condition D25 • Prepare the Aboriginal archaeological test excavation and salvage methodology required under Condition D22 • Present on site to oversee historical and Aboriginal archaeological excavations (Condition D25, REMMs NAH6, AH2) • Advise on archaeological issues and unexpected finds (Conditions D25, D27, REMMs NAH6, NAH8, AH4) • Coordinate with the Aboriginal Excavation Director, Built Heritage Expert and Sydney Metro Heritage Advisor where required • Advise on duration and extent of archaeological excavations in accordance with the approved ARDEM

6. IMPLEMENTATION

6.1. Existing Environment

The potential impacts on Aboriginal and non-Aboriginal heritage resulting from activities during the construction and operational phase of the Sydney Metro West project were assessed during the Planning Approval.

Aboriginal Heritage—Archaeology

The EIS identified the following Aboriginal heritage sites requiring management by Delta for works involving slab/ground surface removal and excavation below slab/ground level:

- AHIMS 45-6-3582—Potential Archaeological Deposit (PAD) at 220-230 Church Street—within the Parramatta station construction site
- Area of Aboriginal archaeological potential—entire Parramatta station construction site
- Area of Aboriginal archaeological potential—Clyde stabling and maintenance facility site

Aboriginal archaeological excavations where required at Parramatta and Clyde will be undertaken in accordance with the AHR 2021 (for Parramatta) developed in response to condition D22 and the ACHAR 2020 (for Clyde).

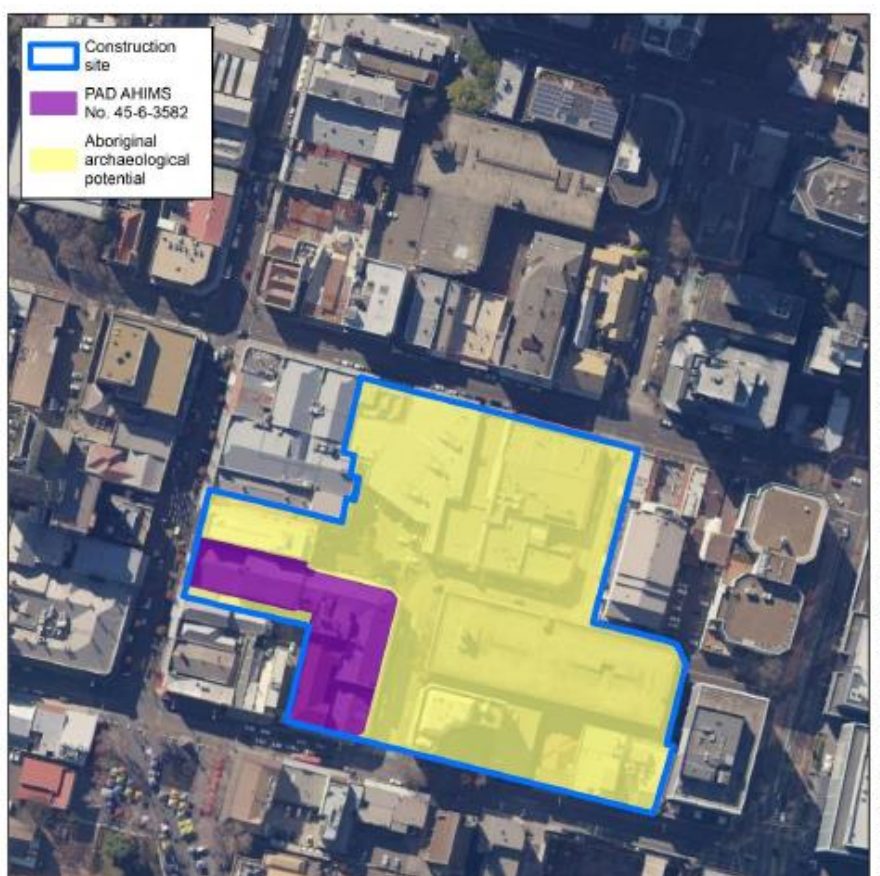


Figure 1 The registered PAD, AHIMS 45-6-3582 and the identified area of Aboriginal archaeological potential for the Parramatta station construction site.

Source: Sydney Metro Westmead to The Bays and Sydney CBD Environmental Impact Statement Technical Paper 4 Aboriginal Cultural Heritage Assessment Report

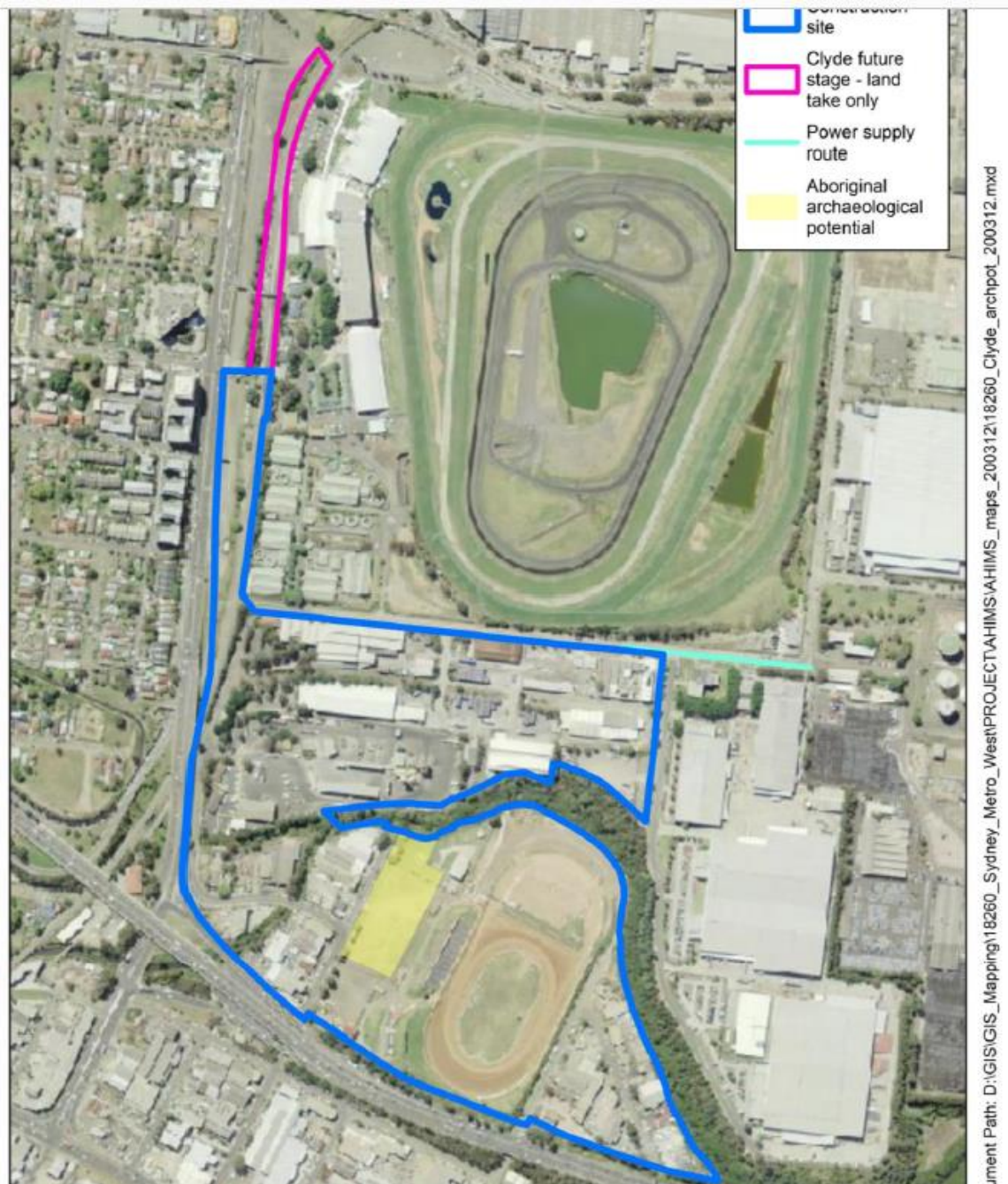


Figure 2 The identified area of Aboriginal archaeological potential for the Clyde stabling and maintenance facility.

Source: Sydney Metro Westmead to The Bays and Sydney CBD Environmental Impact Statement Technical Paper 4 Aboriginal Cultural Heritage Assessment Report

Non-Aboriginal Heritage—Historical Archaeology

The ARDEM 2021 prepared in accordance with Condition D25 identified the following non-Aboriginal (historical) archaeology sites requiring management by Delta for works involving slab/ground surface removal and excavation below slab/ground level:

- Parramatta metro station construction site

Archaeological monitoring and investigations will be in accordance with the methodologies in the ARDEM 2021 and AHR 2021

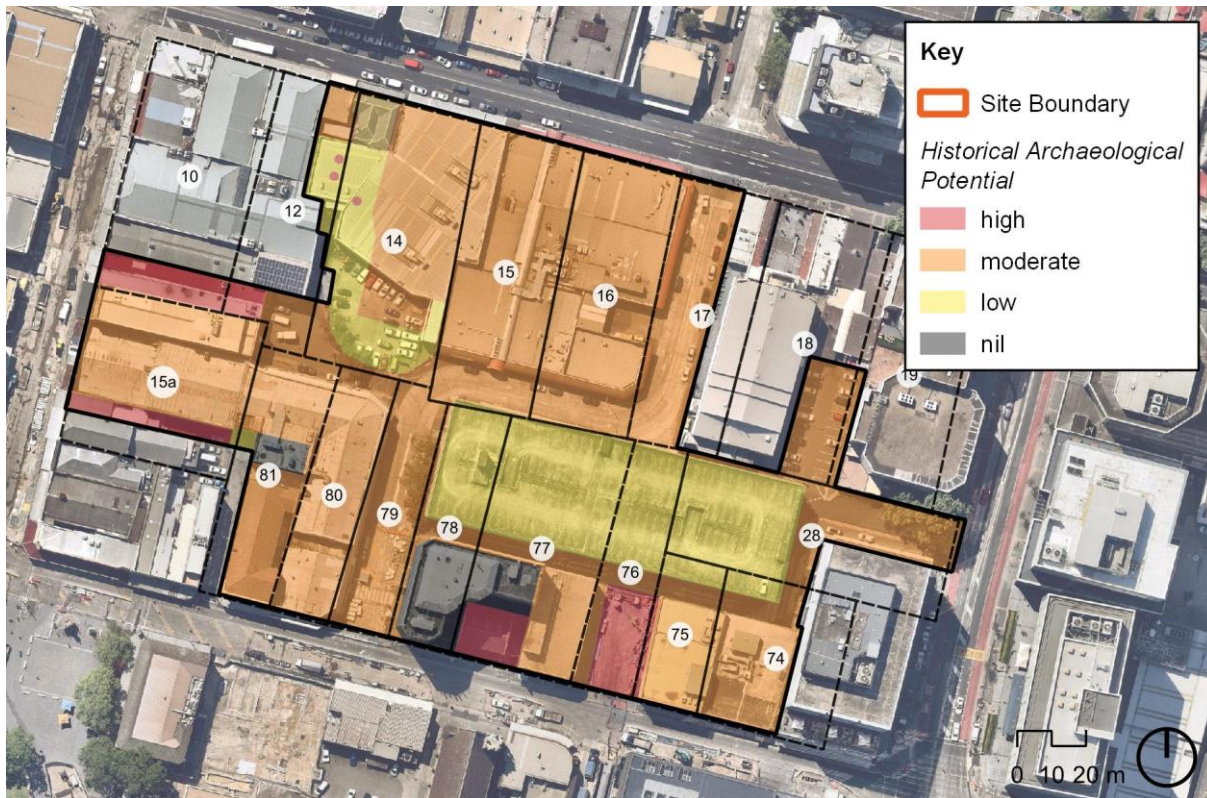


Figure 3 Historical archaeological potential mapping for the Parramatta station construction site

Source: Sydney Metro West Parramatta Station Construction Site Archaeological Research Design and Excavation Methodology, GML Heritage 2021

Non-Aboriginal Heritage—Built Heritage/Listed Heritage Items

In relation to non-Aboriginal heritage, the RtS Report identified the following listed heritage items for the Project (Figure 5) for which specific procedures will be developed by Delta:

- Victorian Regency Terraced Shops at 41-45 George Street, Parramatta (I703)
- Kia Ora Georgian House at 64 Macquarie Street, Parramatta (I716)
- The Roxy Theatre at 67-69 George St, Parramatta (I00711)
- RTA Depot, Clyde (I576)

Further to the above, non-Aboriginal heritage items have been identified on adjoining buildings or beneath site and will be managed and monitored throughout the project timeline as detailed ins section 5.3.

- Convict Drain, Parramatta (I647)
- Horse Parapet Façade is located outside the construction on the corner of Macquarie Street and Church Street (I656)

Sydney Metro prepared a 'Salvaged Materials and Moveable Heritage Register' that identifies the non-archaeological Heritage Items. These items must be carefully removed without damage. A copy of the Salvaged Materials and Moveable Heritage Register is provided in **Appendix A**.

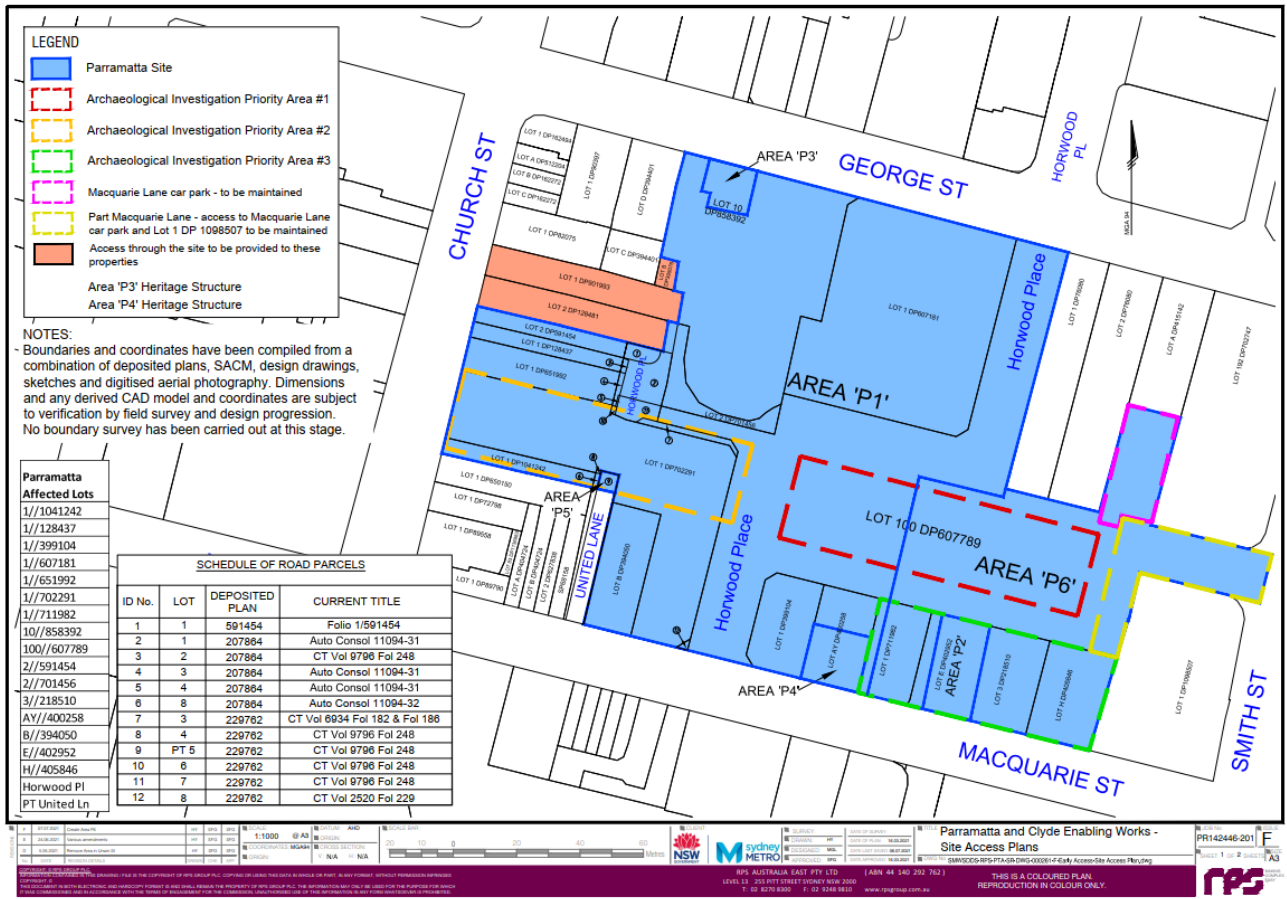


Figure 4 Parramatta metro station construction site Access Plan

Source: Exhibit I – Site Access Plan Minor Works Agreement SM 00013/13014

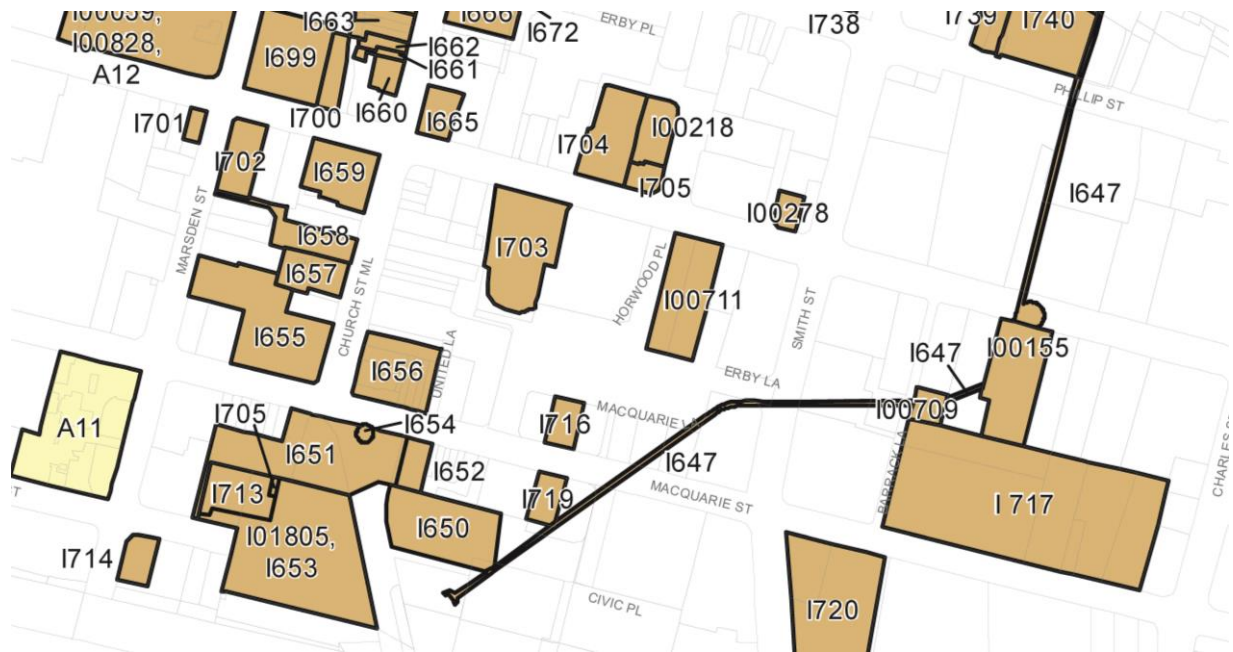
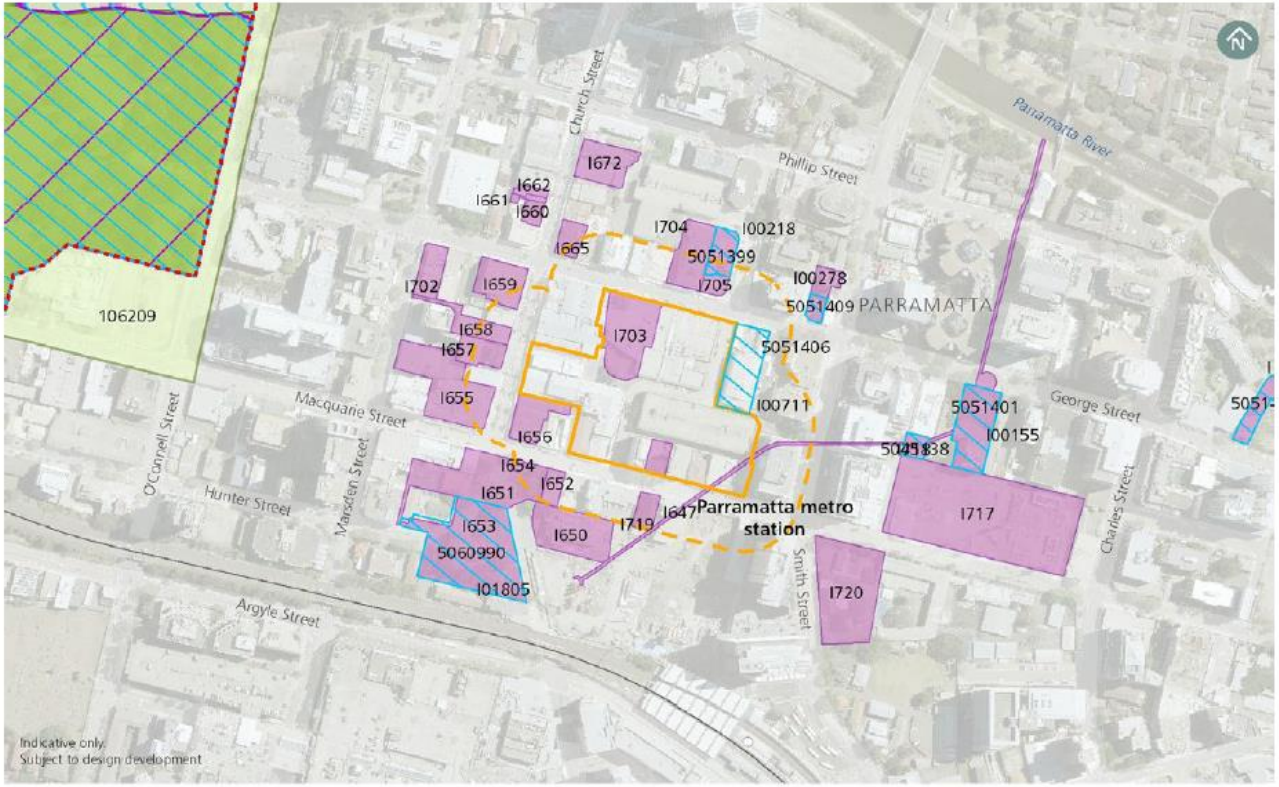


Figure 5 LEP heritage map showing the subject sites

Source: Parramatta LEP 2011 Sheet HER_010



- Construction site
- Study area
- Existing Sydney Trains suburban rail network
- Section 170 item
- State Heritage Register item
- National Heritage List item
- Local Environmental Plan item
- World Heritage List item
- World Heritage List item (buffer zone)

Figure 6 Parramatta metro station construction site – Heritage items and conservation areas

Source: EIS

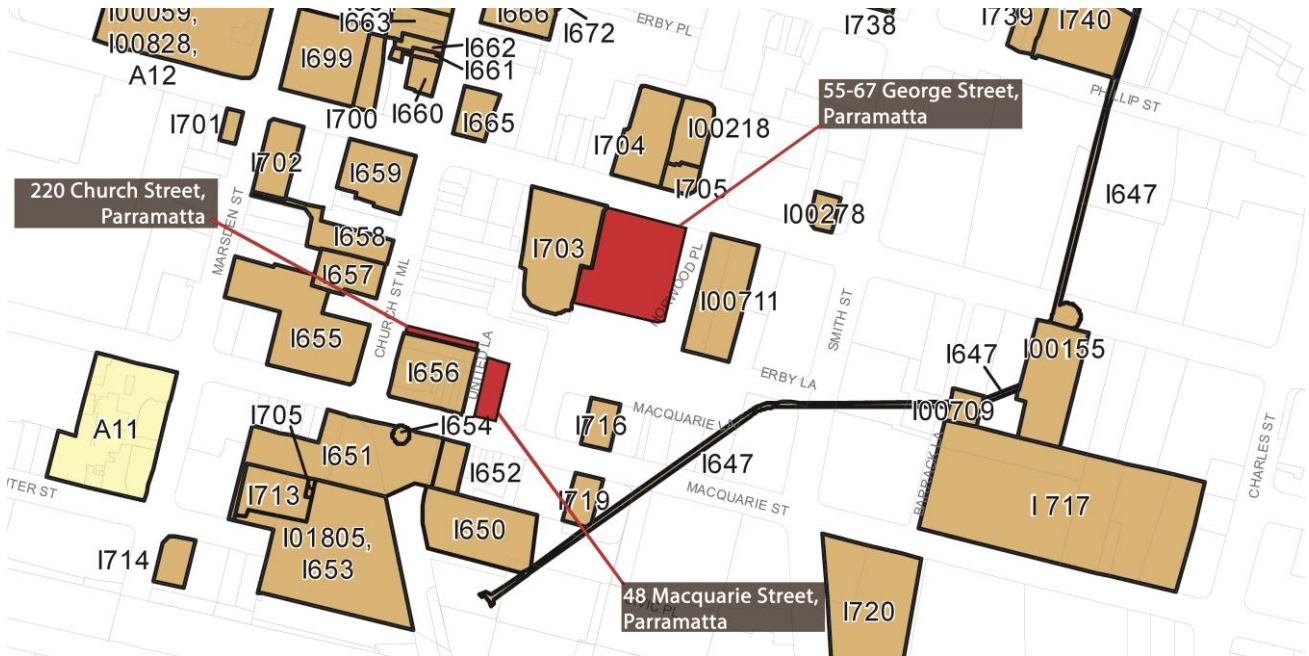


Figure 7 Buildings are to be demolished (in red)

Source: Parramatta LEP 2011 Sheet HER_010, annotated by GML

6.2. Control Measures

General controls and the Revised Environmental Management Measures (REMMs), monitoring, reporting and performance measurements have been identified in this HMSP to minimise and where possible, prevent heritage related impacts resulting from construction. These “Mitigation Measures” are described in **Table 5** below.

Detailed and site-specific mitigation measures have been listed in **Section 6.4** below.

Table 5: Mitigation Measures, reporting and reactive management strategy

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
NAH1.	<p>Archival recording and reporting of the following heritage items 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):</p> <p>Shops (and potential archaeological site)(Parramatta LEP Item No. I703)</p> <p>Kia Ora (and potential archaeological site) Parramatta LEP Item No. I716)</p> <p>RTA Depot (Parramatta LEP Item No. I576)</p> <p>State Abattoirs (SEPP Listing No. A)</p> <p>White Bay Power Station (SHR Listing No. 01015)</p>	✓				✓			Sydney Metro	Archival Recording and Salvaged Materials and Moveable Heritage Register produced by Principal	Ensure archival records are in place prior to demolition commencing.	Ensure archival records are in place.
NAH2.	<p>A method for the demolition of existing buildings and/or structures at specified construction sites would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.</p>	✓	✓	✓		✓	✓	✓	Site Manager, Sub-contractors	<p>Addressed through Demolition Management Plan and Construction Noise and Vibration Management Plan.</p> <p>Site Survey and Demolition Plans</p> <p>Provide surveys of the site areas identifying:</p> <ol style="list-style-type: none"> the listed curtilages (boundaries) of 	No direct or indirect damage to adjacent and/or adjoining heritage items.	Review existing controls and implement additional controls as required.

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
										<p>heritage items on site and adjacent to the site</p> <ol style="list-style-type: none"> 2. the buildings, trees, vegetation and other features of the site overlaid with the heritage significance of these elements 3. the predicted locations of sub-surface structures or potential archaeological deposits 4. extent of demolition proposed including buffer zones. <p>Protection during demolition and works</p> <p>Identify specific protection methods for barriers and/or temporary supports to structures to prevent damage to retained heritage elements.</p> <p>Identify specific methodologies for detachment of fabric to be demolished where</p>		

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
										<p>connected to heritage fabric not approved for demolition.</p> <p>Do not use any heritage listed structure within the Site as a site facility or for the storage of any materials unless otherwise agreed by the Principal at its absolute discretion. [SM-W-PCE-PS-408]</p> <p>Vibration Monitoring during demolition and throughout the course of works</p> <p>Identify vibration thresholds and monitoring methods including the types, location and fixing of monitoring instruments/datums. This is to be done in consultation with the nominated built heritage expert and historic structures engineer.</p> <p>For the purposes of determining acceptable thresholds, all heritage structures should be classed as DIN-4150 Class 3 structures—i.e. 'Structures that, because of their particular sensitivity to</p>		

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
										vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (e.g. listed buildings under preservation order)' and should also consider the thresholds identified under BS7385 in the CNVIS.		
NAH5.	Where heritage items, including significant archaeology are impacted by Stage 1 works, consideration would be given to their inclusion in the Heritage Interpretation Plan for future stages.	✓	✓	✓		✓	✓	✓	Delta Project Manager	<p>Information supplied to Sydney Metro as requested. Salvage in accordance with the salvage register. The Principal has confirmed that the following items have been deemed required to be salvaged, for use by the Museum of Applied Arts and Sciences (MAAS):</p> <ol style="list-style-type: none"> 1. Parramall Shopping Centre sign – North (George Street end) 2. Parramall Shopping Centre sign – South (Horwood Place end) <p>Keep records of salvage and provide to coordinator of heritage interpretation. Keep objects safe until handover to Principal.</p>	Information supplied as requested.	Supply requested information.

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
										The salvage and handover has been specified in the scope of works.		
NAH6.	The archaeological research design would be implemented. Significant archaeological findings would be considered for inclusion in heritage implementation (as per NAH5) for the project and be developed in consultation with the relevant local council.	✓		✓		✓	✓	✓	Sydney Metro Delta Project Manager	Archaeological Research Design prepared by Sydney Metro.	Archaeological Research Design in place prior to demolition works commencing. Implement requirements related to Delta's scope.	Ensure Archaeological Research Design in place prior to demolition works commencing.
NAH7.	An Archaeological Excavation Report would be prepared by the Excavation Director and be provided to the NSW Heritage NSW, Department of Premier and Cabinet within two years of the completion of archaeological excavations specified in the archaeological research design(s).	✓		✓		✓			Sydney Metro Delta Project Manager	Archaeological Research Report prepared by Sydney Metro Information supplied by Delta as requested.	Information supplied as requested.	Information supplied as requested.
NAH8.	In the event that State significant archaeology associated with early convict occupation is located at Parramatta metro station: <ul style="list-style-type: none">In situ conservation would be considered. If in situ conservation is not feasible and reasonable, a strategy to mitigate impacts would be prepared in consultation with the NSW Heritage Council (or delegate)	✓		✓		✓			Sydney Metro Delta Project Manager	Sydney Metro to manage in situ conservation requirements. Delta to facilitate in situ requirements related to the scope.	In situ conservation plan in place if required.	Ensure in situ conservation requirements are included in Toolbox talks as required.

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
	<ul style="list-style-type: none"> An Archaeological Method Statement would be prepared in consultation with the NSW Heritage Council (or delegate) for management of the archaeological remains, whether for conservation or archaeological investigation and recording An accessible publication would be prepared within two years of archaeological excavations to document the archaeological investigations Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities. 											
NAH10.	<p>An assessment of significance would be prepared in consultation with the relevant local council for the following potential unlisted heritage items:</p> <ul style="list-style-type: none"> 220 Church Street, Parramatta 48 Macquarie Street, Parramatta Pine Inn at 19 Parramatta Road, Concord 338-340 Parramatta Road, Burwood Former warehouse shed, Glebe Island. <p>If the assessment of significance confirms these items have local heritage value, an archival recording would be undertaken.</p>	✓		✓		✓			<p>Sydney Metro Demolition Site Manager</p> <p>Sydney Metro's consultant, CityPlan Services, has assessed these buildings within the works areas—namely, 220 Church Street and 48 Macquarie Street, Parramatta.</p> <p>Sydney Metro would undertake Archival recordings.</p>	<p>Archival recordings in place prior to demolition works commencing.</p>	<p>Ensure archival recordings in place prior to demolition works commencing.</p>	

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
NAH11.	No Heritage listed structure within the Site will be used as a site facility or for storage of any materials unless otherwise agreed by the Principal.	✓	✓	✓	✓	✓	✓	✓	Demolition Site Manager	No heritage listed sites used as site facilities, or Approval in place to use heritage listed site. Built Heritage Expert and Historic Structures Engineer to review and confirm location of amenities compound and recommended further mitigating measures.	No heritage listed sites used as site facilities, or Approval in place to use heritage listed site.	No heritage listed sites used as site facilities, or Approval in place to use heritage listed site.
AH1.	Aboriginal stakeholder consultation would be carried out in accordance with the Heritage NSW, Department of Premier and Cabinet's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).	✓				✓	✓	✓	Sydney Metro Delta Project Manager	Sydney Metro to facilitate consultation. Delta to undertake consultation with Registered Aboriginal Parties as required.	Appropriate consultation undertaken.	Ensure appropriate consultation undertaken.
AH2.	Archaeological test excavation (and salvage when required) would be carried out where intact natural profiles with the potential to contain significant archaeological deposits are encountered at the specified construction sites and the Parramatta power supply route. Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report.	✓				✓			Demolition Site Manager	Excavations at Clyde would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report. Excavations at Parramatta would be conducted in accordance with the Aboriginal archaeology excavation methodology developed in accordance	Archaeological test excavation and salvage undertaken when required.	Cease excavation works and ensure archaeological test excavation and salvage undertaken in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report and Aboriginal

Ref.	Mitigation Measure	Works				Site			Responsibility	Monitoring and Reporting	Targets	Reactive Mgt. Strategy
		Low Impact works & Site Set-up	Internal Strip-out	Demolition	Demobilisation	Parramatta	Clyde	Westmead				
										with condition D22 and contained within the Aboriginal Heritage Report prepared by Sydney Metro		Heritage Report (Parramatta station construction site).
AH3.	If Aboriginal archaeological remains are recovered during Stage 1, results would be incorporated into Aboriginal heritage interpretation for the Concept in consultation with registered Aboriginal parties.	✓	✓	✓	✓	✓	✓	✓	Site Manager Delta Project Manager	Daily Inspections Unexpected Finds Procedure Information supplied to Sydney Metro as requested.	Identify potential archaeological remains. Information supplied to Sydney Metro as requested.	Supply requested information.
AH4.	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Sydney Metro Exhumation Management Plan would be implemented.	✓	✓	✓	✓	✓	✓	✓	Site Manager	In accordance with the Sydney Metro Exhumation Management Plan	Managed in accordance with the Sydney Metro Exhumation Management Plan	Managed in accordance with the Sydney Metro Exhumation Management Plan

6.3. Archaeological Investigations

6.3.1. Parramatta Station Construction Site

The Parramatta station construction site is a potential archaeological site and requires management in accordance with the ARDEM 2021 and AHR 2021. In summary the archaeological methodology for the enabling works at this site are as follows.

Enabling Works Activity	Archaeological fieldwork method
Service investigations within previously disturbed areas (ie existing trench alignments).	Unexpected finds procedure. (Refer to Section 6.12, ARDEM 2021)
Removal of services/substations/trees etc.	Archaeological monitoring where excavation outside previously disturbed areas is anticipated. (Refer to Section 6.6, ARDEM 2021)
Geotechnical and contamination testing boreholes	Relocate away from convict hut locations, and areas of high or known archaeology including Town Drain. Supply data for archaeological analysis. Unexpected finds procedure.
Geotechnical and contamination test pits	Relocate away from convict hut locations, and areas of high or known archaeology including Town Drain. Archaeological Monitoring.
Demolition to slab/current ground surface.	Unexpected finds procedure.
Excavation for new service installations (temporary, relocations and diversions).	Test excavation. (Refer to Section 6.3, ARDEM 2021) Salvage excavation or monitoring (depending on testing results). (Refer to Section 6.4, ARDEM 2021) Monitoring if minor or shallow excavations not expected to impact archaeological layers.
Area 2 removal of slab/ground surface (refer to Figure 9)	Archaeological monitoring.
Area 1A and 1B for archaeological clearance works (refer to Figure 9)	Test excavation. Salvage excavation. Archaeological monitoring if localised or shallow excavations are proposed in areas of potential and are not expected to impact significant archaeology. Review for opportunities for conservation/relocation/interpretation of state significant archaeology and Town Drain prior to salvage excavation. (Refer to Section 6.5, ARDEM 2021)

Archaeological Monitoring: Supervision, by an archaeologist, of minor or localised construction related ground disturbance or excavation works within an area of archaeological potential. If archaeological deposits or features are identified, further archaeological investigations, such as test or salvage excavation, would be required prior to construction impact. Refer to Section 6.6 of the ARDEM 2021.

Test Excavation: Archaeological excavation of small test pits or trenches to determine the nature and extent of archaeological deposits and features, prior to construction impacts. Undertaken by the archaeological team for both historical and Aboriginal archaeology. Test excavation will be undertaken as part of service relocation works and the archaeological investigation area, including the alignment of the Town Drain (refer to Figure 9). The test excavation methodology and strategy are provided in Section 6.3 or the ARDEM 2021 and the AHR 2021.

State significant archaeology and the Town Drain impact review: State significant archaeology and physical remains of the Town Drain will be subject to a review. This process is outlined in Section 6.4 of the ARDEM 2021. Further approval under MCoA D15 is required prior to impacts to the Town Drain. D15 is Sydney Metro’s responsibility and Delta will work under their direction in relation to D15.

Salvage Excavation: Detailed archaeological investigation, excavation and recording within localised or large open areas undertaken prior to construction impacts. Salvage excavation will be undertaken as part of service relocation

works and the archaeological investigation area (refer to Figure 9). The salvage excavation methodology and strategy are provided in Section 6.5 of the ARDEM 2021 and the AHR 2021.

Archaeological works, including unexpected finds responses, monitoring, testing and salvage excavation, will be undertaken by the nominated archaeological consultant engaged by Delta. Archaeological works would be undertaken in accordance with the methodologies provided in the ARDEM 2021 and the AHR 2021.

Aboriginal archaeological excavations will include representatives from the Project’s Registered Aboriginal Parties (RAPs) engaged by Delta or the nominated archaeological consultant. Refer to sections 5.2.4, 5.2.5 and 5.2.8 of the AHR 2021.

Archaeological findings and artefacts recovered during archaeological works will be subject to interpretation and curation requirements identified in the ARDEM 2021 (refer to Sections 6.18 and 6.19).

- Artefacts will be securely stored on site temporarily during archaeological excavations and then transferred to the nominated archaeological consultant’s office (and their archaeological specialists) during post-excavation analysis. Once post-excavation analysis is complete, the historical artefact collection will be returned to Sydney Metro’s nominated repository (yet to be determined) for long term storage.
- Aboriginal objects will be temporarily stored in a locked room at the archaeologist’s office. Consultation with the RAPs will be undertaken to determine the long-term curation location for Aboriginal objects.
- Artefacts and other archaeological findings may be included in interpretation and public displays within the new station developments. Details are not yet known; however, the process will be informed by Section 6.19 of the ARDEM 2021 and the Sydney Metro West Heritage Interpretation Strategy (yet to be prepared).
- The archaeological findings would be made available to Sydney Metro to inform heritage interpretation planning for the project.

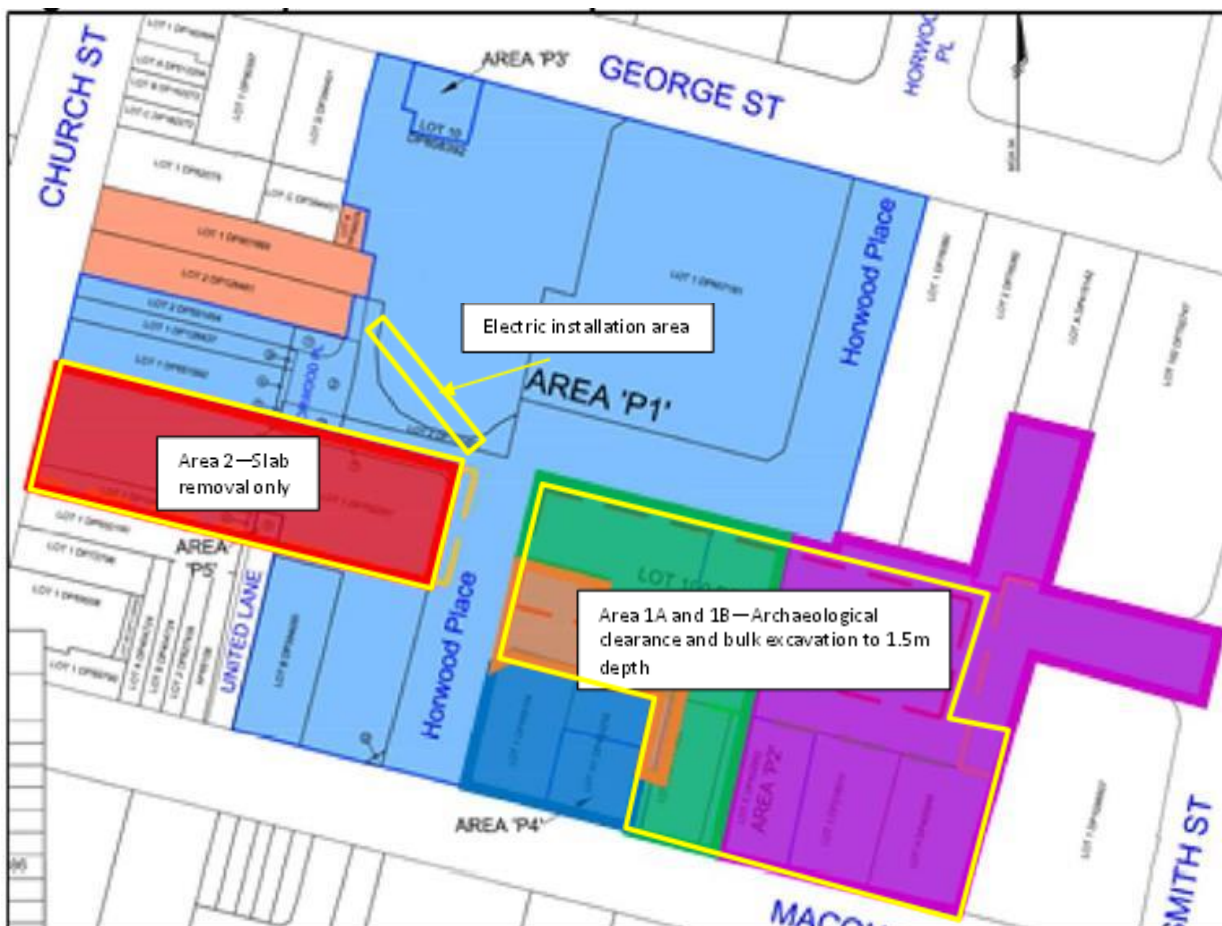


Figure 8 Historical archaeological clearance and associated works during the Enabling Works Program

Source: Sydney Metro with GML annotations

6.3.2. Clyde

Aboriginal archaeological test excavation will be undertaken within the area of Aboriginal archaeological potential identified in the EIS (Figure 3). The test excavation, and salvage excavation if required, methodologies in the Archaeological Method Statement (AMS) prepared for Clyde, as per the ACHAR 2020 and REMM AH2.

The Aboriginal archaeological excavations will be undertaken by the nominated archaeological consultant and representatives from the RAPs, engaged by Delta or the nominated archaeological consultant. Refer to sections 3.2.5 and 3.2.8 of the Clyde WMS 2021.

Artefacts recovered during archaeological works will be subject to curation requirements identified in the AHR 2021 and the ARDEM 2021 (refer to Sections 6.18.2). Artefacts will be securely stored on site temporarily during archaeological excavations and then transferred to the nominated archaeological consultant's office and stored in a locked room. Consultation with the RAPs will be undertaken to determine the long-term curation location for Aboriginal objects.

The archaeological findings would be made available to Sydney Metro to inform heritage interpretation planning for the project.

6.3.3. Westmead

Service investigations within previously disturbed areas (ie existing trench alignments) will be managed with the used of Unexpected finds procedure. (Refer to Section 6.12, ARDEM 2021).

6.3.4. Archaeological reporting

Archaeological investigation findings will be subject to analysis and reporting in accordance with the ARDEM 2021 and the AHR 2021. Sydney Metro will be responsible for submitting the reports to Heritage NSW and DPIE.

6.4. Heritage Management Measures by Location

6.4.1. Wetlands at Parramatta River, Camellia (and Ermington; Parramatta; and Rydalmere) Item no. 11

Refer Flora and Fauna Management Sub Plan section for management of Wetlands (I1). Refer EIS for further background on this heritage item and potential impacts.

6.4.2. Victorian Regency terraced shops at 41-45 George Street, Parramatta

This heritage item is located within the Parramatta metro station construction site. The heritage item consists of the Victorian Regency structure at 43-47 George Street, in addition to a collection of modern structures, at 49-57 George Street which is currently occupied by 'Crunch Fitness'. It will be retained and protected by Delta during the demolition stage of the Project. The heritage curtilage includes adjoining modern buildings that are not considered to have heritage significance, that will be removed as part of the demolition works. Refer EIS for further background on this heritage item and potential impacts.

Delta will provide the following measures:

- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2 and Condition D16 and will include review of protective hoarding or equipment used for vibration and noise monitoring before their installation to ensure any such work does not have an adverse impact on the heritage significance of the item.
- Where Sydney Metro requires access to Victorian Regency Terraced Shops for photographic recordings, Delta will provide Sydney Metro and its contractors with safe access to enable compliance with this requirement.
- As the site has been identified as a potential archaeological site, Delta will implement an unexpected finds procedure (refer to **Section 6.7**) for the unexpected discovery of indigenous and non-indigenous heritage items and human remains throughout Portion of Parramatta works.

6.4.3. Kia Ora Georgian House at 64 Macquarie Street

This heritage item Kia Ora Georgian House is located within the Parramatta metro station construction site at 64 Macquarie Street. It will be retained and protected by Delta during the demolition stage of the Project. Refer EIS for further background on this heritage item and potential impacts.

Delta will provide the following measures:

- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2 and Condition D16 and will include review of

protective hoarding or equipment used for vibration and noise monitoring before their installation to ensure any such work does not have an adverse impact on the heritage significance of the item.

- Where Sydney Metro requires access to Kia Ora Georgian House for photographic recordings, Delta will provide Sydney Metro and its contractors with safe access to enable compliance with this requirement.
- Delta will implement an unexpected finds procedure (refer to **Section 6.7**) for the unexpected discovery of indigenous and non-indigenous heritage items and human remains throughout Portion of Parramatta works.

6.4.4. The Roxy Theatre

The Roxy Theatre heritage item is located immediately adjacent to the construction site at 67-69 George St, Parramatta. The Construction Noise and Vibration Management Plan predicts that the works have potential to expose this heritage item to vibration levels above the cosmetic damage screening criteria. To mitigate the risk of damage caused by exceedance of vibration levels, Delta will undertake the following mitigation measures:

- A more detailed assessment of the structure (in consultation with a structural engineer) and vibration monitoring will be carried out to ensure vibration levels remain below appropriate limits for that structure. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2.
- A more detailed assessment would specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed.
- It will be retained and protected by Delta during the demolition stage of the Project.
- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan and confirmed in consultation with the Built Heritage Expert and Historic Structures Engineer.

Refer EIS for further background on this heritage item and potential impacts.

In accordance with MCoA C13(e), Delta will rectify any damage to the Roxy Theatre caused by the demolition works in consultation with the Built Heritage Expert within six months of the completion of the demolition works.

6.4.5. Convict Drain

The Parramatta metro station construction site includes a portion of the curtilage of the convict drain heritage item, located beneath Macquarie Lane and below no. 74 Macquarie Street (refer to Figure 7, 8 and 10). The location has been identified during recent archaeological works in Macquarie Lane and to the south of the site in Macquarie Street (refer to Section 4.8.4, ARDEM 2021 for further details). The Convict Drain is subject to MCoA D15 and D26.

- D15—requires investigation to locate the drain prior to excavation. It also requires further approval from the Planning Secretary for proposed impacts to the drain. Sydney Metro is responsible for D15 and will advise of the requirements in relation to D15.
- D26—requires early physical investigation (archaeological test excavation) to verify the nature and extent of the convict drain and inform the approach to its management and impact mitigation. The nominated archaeological consultant engaged by Delta will undertake the early physical investigations as part of the archaeological works in accordance with D26 and the methodology in the ARDEM 2021 (refer to Sections 6.3 and 6.4).

Demolition works

Demolition of modern buildings on the site would not result in adverse heritage impact, and would not result in the item's heritage listing eligibility being reduced. Delta will provide the following measures for the convict drain during demolition:

- Demolition will be undertaken to the lowest slab on ground. With all slabs remaining in place for the duration of demolition works. These concrete slabs present at the property 74 Macquarie Street where the Convict drain runs below
- An exclusion zone will be established in Macquarie Lane for heavy plant in the small portion where the Convict drain runs only 400mm below the existing surface levels.
- The largest machine operating in this location will be a 47t excavator. This has a ground bearing pressure of 88kPa

Archaeological works

Archaeological clearance works in Area 1b (refer to Figure 7) will involve archaeological investigations of the Convict Drain in accordance with the ARDEM 2021. This includes test excavation (refer to Section 6.4 of the ARDEM 2021) and impact/conservation review (refer to Section 6.5 of the ARDEM 2021).

Further approval under MCoA D15 is required prior to impact or removal of the convict drain within the archaeological clearance works area (refer to Figure 10). Sydney Metro is responsible for this process and will provide direction regarding the management of the convict drain as part of the archaeological works. Should impact to the convict drain be approved, the methodology for archaeological and archival recording provided in Section 6.5 and 6.8 of the ARDEM 2021 will be followed, along with any further approval conditions imposed as part of compliance with D15.

The archaeological works will be undertaken by the nominated archaeological consultant engaged by Delta.

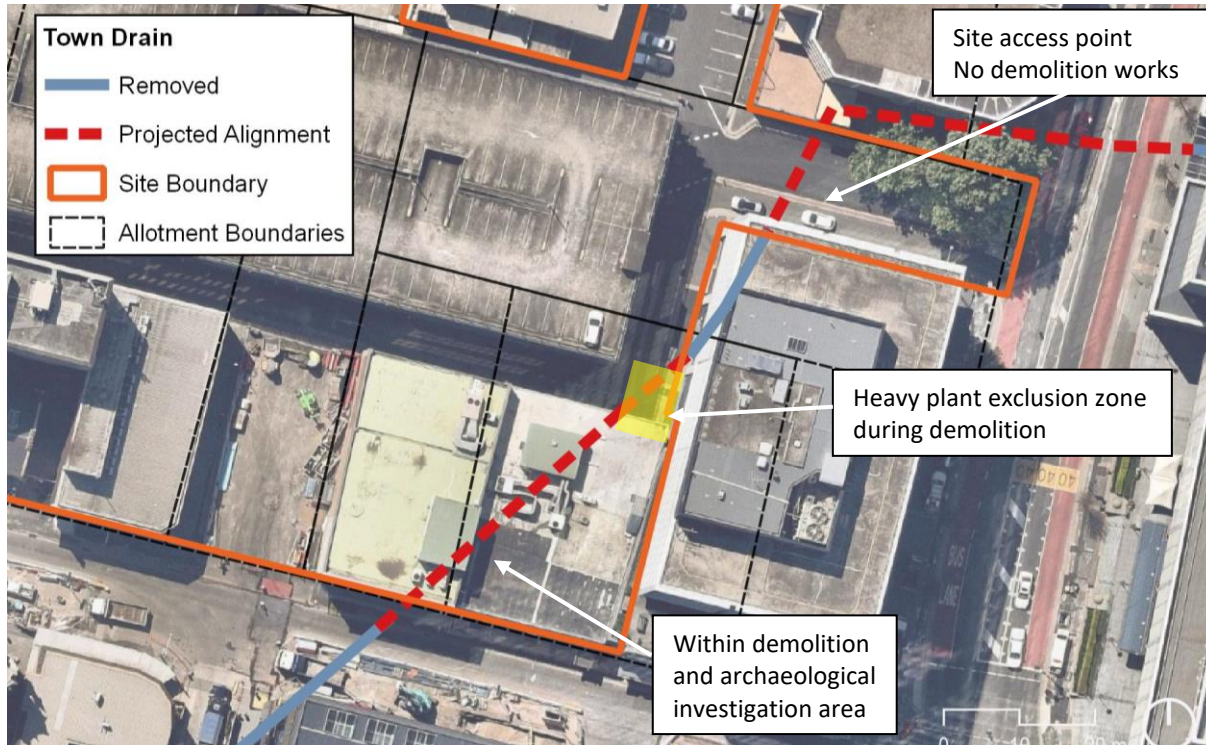


Figure 9 Location of the Parramatta Convict Drain, heavy plant exclusion zone during demolition, and part of alignment within the demolition and archaeological investigation area

Source: ARDEM 2021 with GML annotations

6.4.6. Horse Parapet Façade (and potential archaeological site)

The Horse Parapet Façade is located outside the construction, on the corner of Macquarie and Church Street.

Demolition of modern buildings on the construction site would not result in any substantial adverse heritage impact and would not result in the item’s heritage listing eligibility being reduced.

Delta will provide the following measures:

- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2.

6.4.7. RTA Depot (Clyde)

This heritage item RTA Depot is located within the Clyde stabling and maintenance facility construction site. It will be retained and protected by Delta during the demolition stage of the Project.

Delta will provide the following measures:

- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2.
- Where Sydney Metro requires access to the RTA Depot for photographic recordings, Delta will provide Sydney Metro and its contractors with safe access to enable compliance with this requirement.

- Before installing protective hoarding or equipment used for vibration and noise monitoring, the advice of a suitably qualified and experienced built heritage expert will be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.

In accordance with MCoA C13(e), Delta will rectify any damage to the RTA Depot façade caused by the demolition works in consultation with the Built Heritage Expert within six months of the completion of the demolition works.

6.4.8. Westmead

There are no identified heritage buildings in the vicinity of the construction site. Demolition and clearing works are not likely to result in any impacts to listed significant items or archaeological remains.

Delta will provide the following measures:

- Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2.

6.5. Protection of Adjacent Heritage Buildings

Scaffold will be erected around the adjacent buildings to RTA Depot (Clyde), Kia Ora Georgian House 58-60 and 68 Macquarie Street during the demolition of these buildings by Delta's subcontractor and in accordance with Delta's Health and Safety Management Plan.

Delta will provide the following measures:

- Shade cloth will be installed on to the scaffold to provide both a physical barrier and a visual screen between the building and Delta's demolition works, protecting the building from dust and debris generated by demolition.
- Hoarding will be installed across the Back of The Roxy Theatre to facilitate the installation of scaffold protection around the Carpark Demolition at 71 George Street.
- The design of all temporary works will require approval from the Principal in relation to urban design and visual impacts. Delta will issue the design to Sydney Metro for approval prior to installation.
- Delta will regularly inspect and maintain all construction hoardings and scaffolding. These will be kept clean and free of dust and dirt. Graffiti on construction hoardings or scaffolding will be removed or painted over promptly.
- Site specific delta induction to include heritage protection. A heritage briefing will be given to operatives working adjacent to heritage prior to any works commencing. Works adjacent to heritage building and awning at 41-45 George Street Victorian Regency structure will be carried out by hand and electrical tools only. All works will be managed by an experienced Demolition supervisor.
- Delta will engage and coordinate a noise and vibration specialist and heritage consultant to advise on monitoring locations in accordance with MCOAs D47 and D48. This mitigation strategy will be pertinent to all adjacent heritage items not within the demolition footprint.

6.6. Interpretation and Salvage

Sydney Metro is preparing a Heritage Interpretation Strategy for Sydney Metro West. Delta and the nominated archaeological consultant will provide information about the archaeological findings to inform heritage interpretation planning as required.

Advice on movable heritage and significant fabric has been carried out by Sydney Metro to be documented in the Salvaged Materials and Moveable Heritage Register that will be issued to Delta. A suitably qualified Heritage Specialist will be engaged to advise on the removal, transport and storage of items removed for salvage.

The only item that has been identified for heritage salvage is the Parramatta Mall "Parramall" sign which will be salvaged for the Museum of Applied Arts and Sciences. This is attached in **Appendix A**. Prior to any Salvage work taking place by Delta, all work methodologies will be checked by a qualified heritage consultant. All Heritage salvage work will take place prior to demolition commencing on the relevant building that may impact on the item to be salvaged (refer to photos in **Appendix A**).

Where undocumented heritage is found, or deemed to be found, operatives will follow the unexpected finds procedure as outlined below in **Section 6.7**.

6.7. Unexpected Finds Procedure

6.7.1. Unexpected Finds

An Unexpected Heritage Finds Procedure has been developed by the Sydney Metro for application across the Project, see **Appendix B**. The unexpected finds procedure will apply to all works at Parramatta, Clyde and Westmead. Works at Parramatta are also subject to the unexpected finds procedure outlined in the ARDEM 2021 (refer to Section 6.12). This includes contacting the nominated Excavation Director for advice on unexpected archaeological finds during demolition works.

In the first instance, Delta will verbally notify the Sydney Metro Nominated Representative to seek advice as soon as possible after Delta becomes aware of the unexpected find. Works in the vicinity of the unexpected find will cease immediately. If human skeletal remains are found during the Project, works will cease immediately across the whole of the site.

Unexpected finds of archaeological relics (local or state) as defined by the *Heritage Act 1977* require notification under Section 146. Lodgement of a Section 146 notification will be through the NSW Heritage Management System.

If human skeletal remains are identified any archaeological investigation would be undertaken by the Principal in accordance with the *Skeletal Remains: Guidelines for Management of Human Skeletal Remains* (Heritage Council of NSW, 1998). An Exhumation Policy for the Project will be developed by the Principal, where necessary, and will be adhered to by Delta.

The Unexpected Finds Procedure is illustrated in Figure 11.

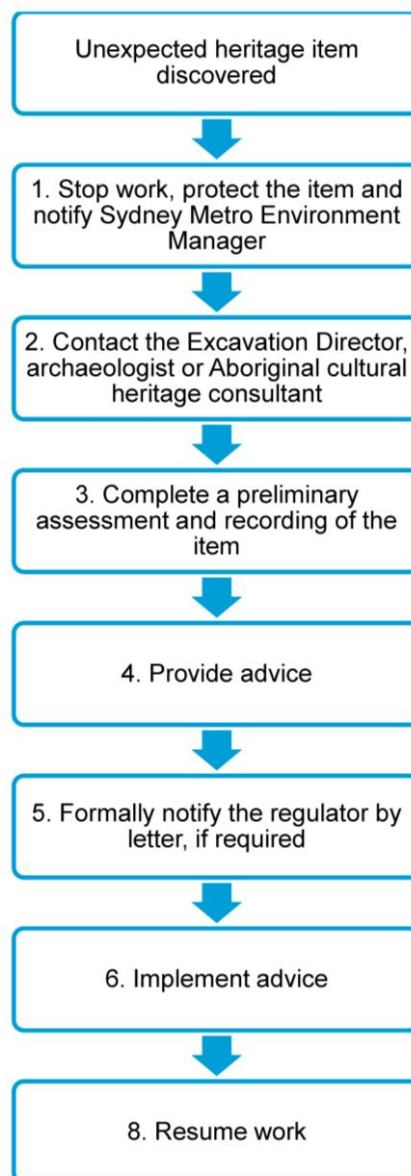


Figure 11 Unexpected Finds Procedure

Source: Sydney Metro Unexpected Finds Procedure May 2021

6.7.2. Notifiable Events

A notifiable event is any environmental incident or non-compliance issue that triggers a specific statutory requirement to notify a regulatory authority. Notifiable events that are relevant to the heritage aspects of the Project are:

- Discover relic: Condition E20 of the MCoAs requires the Excavation Director to be notified to assess the finds, identify their significance level, and provide mitigation advice according to the significance level and the impact proposed;
- Unexpected finds of archaeological relics (local or state) as defined by the *Heritage Act 1977* require notification under Section 146. Lodgement of a Section 146 notification will be through the NSW Heritage Management System.
- Discover Aboriginal remains: Section 20 of the *National Parks & Wildlife Act 1974* requires notification to be made in writing to the Director-General of EPA within a reasonable time after becoming aware of the find;
- Discover aboriginal relic: Section 91 of the *Commonwealth Aboriginal & Torres Strait Islanders Heritage Protection Act 1984* requires notification to be made in writing to the Commonwealth Minister of the Environment as soon as practicable after becoming aware of the find;
- Non-compliance: Condition A45 of the MCoAs requires the Planning Secretary to be notified in writing via the Major Projects website within seven (7) days after the Proponent becomes aware of any non-compliance with the conditions of this approval; and
- Condition A46 of the MCoAs requires non-compliance notification to identify the CSSI (including the application number for it), set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be undertaken to address the noncompliance. Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

6.7.3. Environmental Incidents

An environmental incident is an occurrence or set of circumstances in which pollution or an adverse environmental impact has occurred or is likely to result. An adverse environmental impact includes damage to a heritage item.

Where damage to a heritage item results from Delta's activities, the Environmental Incident Response procedure within Construction Environmental Management Plan (CEMP) will apply as follows:

- Delta will verbally notify the Director-General of Heritage NSW as soon as possible after Delta becomes aware of an incident. The Nominated Representative will provide advice to Delta on the classification of the incident and whether notification to any regulatory authority is required.
- Condition A43 of the MCoAs requires the Planning Secretary to be notified via phone or in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. Any notification via phone must be followed up by a notification in writing via the Major Projects website within 24 hours of the initial phone call. The written notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and general nature of the incident.
- Condition A44 of the MCoAs requires that a Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix A of the Approval.

6.8. Consultation

The HMSP has been provided to relevant stakeholders including Local Council, NSW Department of Environment, Industry and Planning (DPIE) and the NSW Heritage Council.

Ongoing consultation will be undertaken throughout the Project, including with the NSW Heritage Council, where required, and the Sydney Metro Design Review Panel and will be amended as required during the Project.

Please see **Appendix C** for a list of stakeholders consulted and their responses with prior to submitting to planning.

Need to include evidence of consultation in relevant appendix

7. TRAINING

IMS Procedure 03, Competency, Induction and Training requires that all persons (permanent and temporary employees and contractors) who undertake work on a Delta Group site must as a minimum hold a current:

- Generic Construction Industry OHS Induction;
- Delta Group induction;
- Client induction (as required);
- SWMS, toolbox, and SOP inductions;
- Site Management Plan/s induction; and

- Site specific inductions.

7.1. Site inductions

Site Inductions will be conducted by the Work Health and Safety Manager, Site Manager, or designated person. Workers, including Delta employees, contractors, sub-contractors, and suppliers, must undergo Site Induction training and be deemed competent prior to being given approval to access Delta’s Project sites.

Visitors and consultants who are to be escorted at all times, or who will not undertake work outside the Site Office area, will not need to undergo the Site Induction.

Site Induction training will inform all site personnel about their requirements and responsibilities for heritage and archaeological management under the HMSP, the protection of adjacent heritage and other buildings, and operation of vibration-generating equipment alongside heritage buildings prior to its demolition.

7.2. Management Plan Training

Management Plan training will be carried out prior to personnel commencing work on the Project. Management Plan training will include the provisions of the Delta HMSP.

Refresher training will be carried out after six months following commencement of the Project, and as required, when site inspections, audits, task observations and the like uncover work practices not in accordance with the Plan.

7.3. Toolbox Talks

Toolbox talks will be conducted weekly as a minimum, and will be used to present the status of safety and environmental performance, incidents, safety and security alerts, lessons learnt, bulletins, messages, etc.

A heritage toolbox will be conducted at Parramatta and Clyde for personnel undertaking archaeological clearance works. The toolbox will include requirements and responsibilities relating to archaeology and Aboriginal cultural heritage.

The Environment and Sustainability Manager will periodically participate in the weekly toolbox talks to emphasise aspects of environmental management or to provide updates when there are changes to legislation, work methods, or scope. Following any heritage related incident, the Environment and Sustainability Manager will provide an incident-specific toolbox lesson for all site personnel.

Delta’s IMS Form 054 Toolbox Meeting will be used to record all toolbox talks.

8. MONITORING AND INSPECTION

8.1. Site Inspections

Delta will carry out surveillance of protection measures, including checking of heritage mitigation measures, in accordance with Procedure 24 Inspection, Monitoring and Measurement. Regular site inspections are carried out by the Site Manager, and recorded on SEF 049 Site Inspection Report. Site inspections cover the whole of the Portion, including the site perimeter, and assess progress, risk, opportunities, and quality, safety, and environmental aspects of the Project. Daily Pre-start inspections are carried out by the Site Manager and recorded on Safety and Environmental Form SEF 047 Site Diary - Daily pre-start.

Periodic inspections by Delta’s Environmental and Sustainability Manager (or delegate) will be carried out to verify the adequacy of all environmental measures. This will be documented in SEF 049 Site Inspection Report.

A timetable of site inspections is provided in **Table 7** below.

Table 7 Site Inspection Timetable

Inspection	Frequency	Content
Daily Pre-start	Daily	Safety, environment, quality
Site Inspection	Weekly	Safety, environment
Environmental Inspection	Weekly	Environment
ER Inspection	Weekly	Environment

8.2. Condition Surveys of Heritage Sites

In accordance with MCoA C13(d), Delta will be undertaking post condition surveys of the Roxy Theatre & the RTA Depot within three months of completion of the Demolition Works. Further information on how conditions surveys will be conducted in accordance with MCoAs D60 and D61 is detailed within Section 6.8 of the CEMP.

8.3. Monitoring Procedure

8.3.1. Noise and Vibration Monitoring

In accordance with MCoA D63, noise and vibration monitoring will be undertaken using permanent installations at the nearest representative sensitive receivers around the demolition site as identified in the relevant Detailed Noise and Vibration Impact Statements. Results from these monitors shall be reviewed on a weekly basis to ensure ongoing compliance. Where complaints are received, additional monitoring may be conducted at the specific location of complaint.

Monitoring results shall be made available online for access by key project stakeholders. Proposed permanent monitor locations are detailed the Noise and Vibration Management Sub Plan and Noise and Vibration Impact Assessments. The number and location of monitoring points shall be reviewed after an initial period of 2 - 3 months. Where noise and vibration levels are negligible and, in consideration of the works still to be completed, those levels are not expected to increase for the remainder of the project, consideration shall be given to the removal of redundant monitoring points.

8.3.2. Vibration Screening Criteria

Heritage buildings and structures will be assessed as per the screening criteria in the Noise and Vibration Management Sub Plan and the Sydney Metro City Construction Noise and Vibration Standard (SM020-00098866).

British Standard 7385: Part 2 1993 suggests levels of vibration at which cosmetic, minor, and major damage may occur, and that vibration levels up to the cosmetic damage level are considered safe and have produced no observable damage for building types.

Heritage buildings should not be assumed to be more sensitive to vibration unless they are found to be structurally unsound. Therefore, the cosmetic damage screening level per receiver type is:

- 25 mm/sec for reinforced or framed structures; and
- 7.5 mm/sec for unreinforced or light framed structures.

Where a heritage item is found to be structurally unsound, a more conservative cosmetic damage criterion of 2.5mm/sec peak component particle velocity must be applied. Condition inspections will be prepared by Delta's sub-contractor and submitted to the Principal in accordance with the terms of the contract prior to the commencement of demolition.

Exceedance of the cosmetic damage level will not require demolition to cease, but alerts the Site Manager to proceed with caution at reduced force or load, or reduce the number of vibration-generating plant/equipment items operating simultaneously. An exceedance will also require the Project Manager to implement alternative techniques pending further analysis of the vibration frequency content in order to determine any potential exceedance of the criteria presented in the NVMSP.

8.4. Site Audits

Delta carries out routine safety, environmental, and quality audits of all of its projects. Delta's heritage management measures will be incorporated into these in accordance with Delta's IMS Procedure AUD 005 Audit Environmental and as a component of this HMSP.

Where Delta performs compliance audits of its systems and procedures, the Principal will be invited to participate in the audit planning and oversee conduct of the audit. Delta will later provide a copy of the audit report to the Principal.

Where sub-contractors are employed to deliver aspects of the Project, Delta will require its audit and surveillance requirements are maintained by the sub-contractor, and provide evidence that the sub-contractor's activities are being effectively overseen by Delta. If requested by the Principal, Delta will provide evidence of the effective implementation of management systems and procedures by its sub-contractors.

Delta's management plans, systems, and processes will be subject to audit and surveillance by the Principal to gain assurance that Delta has established effective management systems and processes to meet the requirements of the Contract. The Principal may utilise its own auditors and surveillance officers to perform these activities, supported by subject matter experts where relevant.

The audit and surveillance activities may include risk-based compliance testing, desktop review of documentation, inquiry and observation of activities, or review of developing processes or activities.

Delta will be cooperative in assisting the Principal's auditors and surveillance officers in undertaking their duties. This will include providing safe access to sites, systems and documentation, providing facilities to perform audits and surveillance, and the participation of Delta and Subcontractor representatives as required.

A timetable of site audits is provided in **Table 8**.

Table 8 Site Audit Timetable

Inspection	Frequency	Content
Internal HSEQ Audit	Monthly	Safety, environment (including heritage), quality
Internal Project Audit	Monthly	Project objectives Project specific management plans and procedures (including the HMSP)
Principal's Audit	As determined throughout contract	Project management plans, systems, and processes

9. RECORDS AND REPORTING

9.1. Compliance Records

Delta will retain copies of all compliance records generated for heritage management and heritage monitoring. These records will include:

- Inspections undertaken in relation to heritage management measures;
- Archival recordings undertaken of any heritage item;
- Unexpected finds and stop work orders;
- Records of any impacts avoided or minimised through design or construction methods; and
- Vibration monitoring of heritage items, including exceedances and actions taken in response.

Delta will notify the Director-General of Heritage NSW where Delta becomes aware of an unexpected find. Works in the vicinity of the unexpected find will cease immediately. Depending on the nature of the unexpected find, ongoing management will be carried out by Sydney Metro, or the NSW Police. Delta will retain records as required by these parties.

9.2. Reporting

9.2.1. Heritage Incident/Non-Compliance Report

Incident or non-compliance reports will be provided to the Principal's Representative within 48 hours of the observation using either SEF 010-A Accident-Incident Report or SEF 052 Non-conformance Report.

The Principal's Representative will review the report and provide advice to Delta if necessary, on any requirements for an incident investigation.

9.2.2. Incident Register

Delta will maintain an incident register to manage the information associated with reporting of unexpected finds, heritage inspections, and non-compliances. The register will be maintained by the Environment and Sustainability Manager and will assist Delta to report monthly to the Principal in accordance with the requirements of the Contract.

The Delta Health and Safety Manager will be responsible for updating the incident register following an incident or non-compliance.

The incident register will be submitted to Sydney Metro upon request.

9.2.3. Monthly Report

Delta will prepare and submit a monthly report which meets the requirements of the Contract. The Monthly Report will be submitted to the Principal's Representative for review.


10. APPENDICES




A. SALVAGE RECOMMENDATIONS


The following table is extracted from Heritage Salvage Advice Report by City Plan Heritage P/L, R03, issued 29/07/2021. It identifies the location and condition of those elements and materials by CPH which may be salvaged from 220 Church Street, 48 Macquarie Street and Parramall Shopping Centre in Parramatta, prior to the commencement of any removal or demolition works. It is appreciated that some of these salvageable elements/detailing may need to be removed when the demolition works commence. Recommendations have been made accordingly in the table below to ensure no damage occur to the identified elements during the removal in the case of being removed following commencement of demolition works. The recommendation for the 'reuse' of salvaged materials relates to their retrieval from the site and provision to recycling yards so that in future these materials may be used in other heritage conservation projects when required.

These items were identified for potential recycling or use in interpretation. None were required to be salvaged as their significance would not be retained after demolition. The only exception to this is the Parramall sign which will be salvaged and delivered to the Museum of Applied Arts and Sciences (Castle Hill storage) for future interpretive purposes.

Table 5 Identified elements for salvage showing the building, element, location and future use.


Location/ Label Registration No.	Element	Reuse/ Recommendation and Significance	Image
220 Church Street			
It is as an example of Victorian commercial terrace building retains several fabric elements that have the potential to be salvaged and recycled in future. Due to the high level of modification on the ground floor, the materials to be salvaged relate largely to detailing on the first floor. This includes door frames, skirting, cornices and picture rails, as well as an individual vent grill and ceiling rose.			
West façade (indicated in red) Label: 'Ext.Prpt.1'	Parapet Feature (building name plate)	Interpretation/recycle (Optional) Note: This naming plate may need to be removed during the demolition works. Ensure to salvage it first by saw-cutting together with the engaged piers on both sides and to the extent of the parapet height as indicated through red outline. The existing parapet of 220 Church Street is of High significance as an original element of the building. The element demonstrates the aesthetic characteristics of Victorian commercial design, while also identifying the structure as part of the original 'Fuller's Buildings' site. While the removal of the parapet would relinquish some of its significance in context, the sign still retains significance as associated with the other surviving Fullers Buildings on Church Street. The potential for interpretation of the formerly existing 'Fuller's' sign in connection to the existing piece at 220 Church Street would be a valuable addition to the Church Street precinct enriching the understanding of the area's commercial history, and the nearby Horse Parapet buildings. The salvage of the parapet could be an option if confirmed for interpretation by the	

Location/ Label Registration No.	Element	Reuse/ Recommendation and Significance	Image
<p>Level 1, entirety of original building (west side). Including 3 rooms and corridor. Label: 'Int.Lvl1.DF1' 'Int.Lvl1.DF2' 'Int.Lvl1.DF3' Etc.</p>	<p>Door Frames</p>	<p>interpretation strategy to be prepared for the site.</p> <p>Recycle (Optional)</p> <p>The existing door frames are of Moderate significance to the site as elements of the original construction of the building with aesthetic contribution to the site helping to understand the historical provenance of the building. It is desirable that these elements upon removal be salvaged and recycled/sold.</p> <p>Should their recycle is not practicable then disposal to a recycling timber yard or similar second-hand construction materials place may be considered.</p>	
<p>Level 1, entirety of original building (west side). Including 3 rooms and corridor. Label: 'Int.Lvl1.SK1' 'Int.Lvl1.SK2' etc.</p>	<p>Skirting</p>	<p>Recycle (Optional)</p> <p>The existing skirting boards are of Moderate significance as elements of the original construction of the building with aesthetic contribution to the site helping to understand the provenance of the building. These elements upon their removal have scope for future salvage and recycle/resale. However, their salvage for reuse is not necessary.</p>	
<p>Level 1, third room from the west (original building) west wall. Label: 'Int.Lvl1.V1'</p>	<p>Vents</p>	<p>Interpretation/Recycle (Optional)</p> <p>The remaining vent grate is of High significance as an element of the original construction of the building with aesthetic contribution to the site helping to understand the provenance of the building, and scope for future salvage and recycle/resale. The element's intricate design is easily identifiable as part of the Victorian construction of the building. The salvage of the vent grill is an option if required by the interpretation strategy to be undertaken for the site, otherwise recycling should be considered.</p>	
<p>Level 1, westernmost room (original building) Label: 'Int.Lvl1.PR1'</p>	<p>Picture Rails</p>	<p>Recycle (Optional)</p> <p>The existing picture rails are of Moderate significance as elements of the original construction of the building with aesthetic contribution to the site helping to understand the historical provenance of the building. These elements upon removal their have scope for future salvage and recycle/resale.</p>	

Location/ Label Registration No.	Element	Reuse/ Recommendation and Significance	Image
Level 1, westernmost room (original building) Label: 'Int.Lvl1.CR1'	Ceiling Rose	Interpretation/Recycle (Optional) The existing ceiling rose of is of High significance as an original element of the building. The element demonstrates the aesthetic characteristics of Victorian commercial design, while also identifying the structure as part of the original Fuller's Buildings' site. The ceiling rose is of an intricate design of high ornamental value, easily identifiable as part of the Victorian provenance of the building. The salvage of ceiling rose is an option if required by the interpretation strategy to be undertaken for the site, otherwise recycling should be considered.	


48 Macquarie Street

Is a fine example of post-war modernist design is characterised by its striking and progressive form with tasteful finishes. However, due to the very functional approach of modernist design, detailing and ornamentation as they were in previous periods of architectural history are largely avoided. Therefore, the building at 48 Macquarie Street as an example of this functional practice retains little salvageable detailing that could potentially be directly re-used or utilised in interpretation. The main exception to this is the finely crafted staircase balustrade and timber handrail which should be salvaged prior to demolition works. In addition, two plaques have been identified that are connected to the original safe rooms within the building, that are valuable as evidence in the common post-war practice of installing safe rooms in office buildings and could be reused elsewhere in future.

Central Building Void, Ground Floor, Level 1 and Level 2 Label: 'Int.Bldg.Stairs'	Staircase balustrade and timber handrail.	Recycle (Optional) If possible, salvage terrazzo treads for recycling. The staircase structure and balustrade of 48 Macquarie Street is the of High significance as one of the only remaining decorative features of the building that showcases high aesthetic in the context of its modernist design. Its salvage for recycling is desirable if practical.	
---	---	--	---

Parramall Shopping Centre

It is an arcade building constructed c.1979. The building houses a number of speciality shops and commercial operations. The semi-circular arched arcade with curved metal roof and projecting neon-light style signage facing George Street and Horwood Place are significant local icons that are well known and important to the local community. The mall itself and its original signage are characteristic of widescale commercial development in Parramatta throughout the 1970s-1980s in particular its labyrinth of arcades which characterised this particular era of development. While the building is not considered of high architectural or technical significance, it has some historic and social value as a local landmark important to the community. The salvage of this item has been requested by the Museum of Applied Arts and Science for the purpose incorporation into their collection associated with the Powerhouse Museum.

Location/ Label Registration No.	Element	Reuse/ Recommendation and Significance	Image
<p>Parramall north and southern entryways facing Horwood Place and George Street.</p>	<p>Parramall neon Sign</p>	<p>Interpretation / Conservation</p> <p>The Parramall Sign provides a visual representation of the bright stylistic character of commercial development in Parramatta during the 1970s-1980s. The arched curve of the base structure and the font and of the neon-style lit text are easily identifiable as a reminder of the former structure. The sign has interpretive value as a representation of the commercial history of Parramatta during its era of construction. Provide the sign to Powerhouse Museum for inclusion in their Collection.</p>	

B. SYDNEY METRO UNEXPECTED HERITAGE FINDS PROCEDURE & EXHUMATION MANAGEMENT PROCEDURE

[SM-18-00105232] Version 4.1 dated May 2021

[SM ES-PW-315/5.0] Version 5.1 dated May 2021



Sydney Metro Unexpected Heritage Finds Procedure

SM-18-001105232

Metro Body of Knowledge (MBoK)

Applicable to:	Sydney Metro
Document Owner:	Senior Heritage Advisor
System Owner:	Director Environment, Sustainability and Planning
Status:	Final
Version:	4.1
Date of issue:	May 2021
Review date:	May 2022 (every year or as required)
© Sydney Metro 2021	

Table of contents

- 1. Introduction.....3**
 - 1.1. Purpose.....3
 - 1.2. Scope.....3
 - 1.3. Definitions and abbreviations4
 - 1.3.1. What is an unexpected heritage find?.....4
 - 1.3.2. Abbreviations4
 - 1.4. Accountabilities5
- 2. Types of unexpected heritage finds and their statutory protections5**
 - 2.1. Aboriginal objects.....6
 - 2.2. Historic (non-Aboriginal) heritage items.....6
 - 2.2.1. Archaeological relics7
 - 2.2.2. Other items.....7
 - 2.3. Human skeletal remains.....7
- 3. Unexpected heritage finds procedure8**
- 4. Responsibilities17**
- 5. Seeking advice.....17**
- 6. Related documents and references.....18**
- 7. Superseded documents18**
- 8. Document history18**
- Appendix 1: Examples of unexpected heritage finds19**
- Appendix 2: Unexpected Heritage Find Recording Form25**
- Appendix 3: Photographing unexpected heritage items28**
 - Context and detailed photographs28
 - Photographing distinguishing features28
 - Photographing bones.....29
- Appendix 4: Archaeological / heritage advice checklist.....31**
- Appendix 5: Template notification letter.....32**

Figures

- Figure 1: Summary of steps to be taken on the discovery of an unexpected heritage item 9

Tables

- Table 1: Specific tasks to be implemented following the discovery of an unexpected heritage item .. 10
- Table 2: Roles and responsibilities 17

1. Introduction

1.1. Purpose

This procedure has been prepared to provide a consistent approach to the management of unexpected Aboriginal and non-Aboriginal heritage uncovered during Sydney Metro activities. It applies to all Sydney Metro activities, both the pre-construction (prior to the Construction Heritage Management Plan approval) and construction phase (post Construction Heritage Management Plan approval) and pre or post-approval activities that are subject to the NSW *Heritage Act (1977)* (Heritage Act) and the *National Parks and Wildlife Act 1974* (NPW Act).

In NSW, there are strict laws to protect and manage both Aboriginal and non-Aboriginal heritage. As a result, appropriate management measures need to be implemented to avoid or minimise impacts, ensure compliance with statutory requirements, 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, Industry and Environment.

Note that a Contractor must not amend the *Sydney Metro Unexpected Finds Procedure* or use a different procedure without the prior approval of Sydney Metro.

This procedure must be read in conjunction with the relevant approval conditions, contract documents and other plans and procedures including the *Sydney Metro Exhumation Management Procedure*, in addition to any other relevant documents as developed by the contractor for the delivery of Sydney Metro activities.

1.2. Scope

This procedure applies to the discovery of any unexpected heritage item, where the find is not anticipated in an approved Archaeological Research Design (ARD) or Archaeological Method Statement (AMS) or other project specific document related to heritage. It applies to all Sydney Metro activities.

This procedure must be followed by all Sydney Metro staff, contractors, subcontractors or any person undertaking work 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 *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW 4376 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 State Significant Infrastructure (SSI) /State Significant Development (SSD) planning approval; or

- the discovery and disturbance of a heritage item of local significance, where the find is identified and anticipated to occur in an AMS or ARD.

Construction Environment Management Plans (CEMP) should reference or include this procedure. Where there is an approved CEMP, it must be followed in the first instance. Where there is a difference between approved CEMPs and this procedure, the approved CEMP must be followed. Where an approved CEMP does not provide sufficient detail on particular issues, this procedure should be used as a reference.

1.3. Definitions and abbreviations

1.3.1. What is an unexpected heritage find?

An ‘unexpected heritage find’ can be defined as:

- any unanticipated discovery of an Aboriginal object or archaeological work or relic, which Sydney Metro does not have approval to disturb and/or is not covered under an existing management process or plan
- a find that has not been identified or assessed in a project assessment or document related to heritage
- a find that is not referenced in an archaeological research design (ARD) or archaeological method statement (AMS)
- a find that is not covered by an existing approval under the NPW Act or Heritage Act.

1.3.2. Abbreviations

All terminology in this document is taken to mean the generally accepted or dictionary definition. Other terms and jargon specific to this document are defined within the [SM-17-00000203 Sydney Metro glossary](#). Acronyms specific to this document are listed below.

	Definitions
AHIP	Aboriginal Heritage Impact Permit
Aboriginal object	An Aboriginal object is any deposit, object or material evidence (not being a handcraft 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.
ARD	Archaeological Research Design
AMS	Archaeological Method Statement
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>

Disturbance	Disturbance is considered to be any physical interference to an item that results in it being destroyed, defaced, damaged, harmed, impacted or altered in any way (this includes archaeological investigation activities).
Excavation Director	A person that has been determined by the Heritage Council of NSW or delegate to meet the Criteria for Assessment of Excavation Directors (4 September 2019 and as updated) and can therefore competently archaeologically investigate a site of either local and/or state significance.
Heritage Act	NSW <i>Heritage Act 1977</i>
NPW Act	NSW <i>National Parks and Wildlife Act 1974</i>
Heritage NSW	Formerly Office of Environment and Heritage (OEH). Now Heritage NSW as part of the Department of Premier and Cabinet NSW.
IMS	Integrated Management System (IMS)
Relic (non-Aboriginal heritage)	A relic means any deposit, artefact, object or material evidence that: <ul style="list-style-type: none"> a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and b) is of State or local significance.
SSD	State Significant Development
SSI	State Significant Infrastructure
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 track, timber sleepers, kerbing, 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.

1.4. Accountabilities

The Director Environment, Sustainability and Planning is accountable for this document including approving the document, monitoring its effectiveness and performing a formal document review.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document.

2. Types of unexpected heritage finds and their statutory protections

Project, field and environmental personnel (including construction contractors) are critical to the early identification and protection of unexpected heritage finds.

Appendix 1 illustrates the wide range of heritage items uncovered to date during Transport for NSW projects and provides an understanding of what unexpected finds may look like.

Unexpected heritage finds are categorised as either:

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

The relevant legislation that applies to each of these categories is described below.

2.1. Aboriginal objects

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: *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.*

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 Heritage NSW 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).

Examples of Aboriginal objects include stone 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 Heritage NSW. When a person becomes aware of an Aboriginal object they must notify the Director-General of Heritage NSW about its location. Assistance on how to do this is provided in section 4 (Step 5).

2.2. Historic (non-Aboriginal) heritage items

The Heritage Act provides for the care, protection and management of heritage items in NSW. Historic (non-Aboriginal) heritage items include:

- archaeological 'relics' as defined under the Heritage Act; and

- other items such as works, buildings or movable objects, which are not considered ‘relics’ under the Act.

2.2.1. Archaeological relics

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 Heritage NSW under the Act.

A relic is defined as: *‘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.’*

A person must notify Heritage NSW, 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.

IMPORTANT!

All relics are subject to statutory controls and protection.

If a relic is likely to be disturbed, an approval is usually required from the Heritage Council of NSW. When a person discovers a relic, they must notify the Heritage Council of NSW of its location.

2.2.2. Other 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, turn tables, timber sleepers, cisterns, fences, sheds, buildings and conduits.

Usually archaeological relics are uncovered via a process of excavation or soil removal. When an unexpected find is uncovered, an archaeological excavation permit under section 140 or section 60 of the Heritage Act may be required to further investigate or remove it if investigation is not covered by an existing approval. In contrast, ‘other historic items’ either exist above the ground surface (for example a shed), or they are designed to operate and exist beneath the ground surface (for example a culvert). They may also need a permit to alter, disturb or remove them if there is not an approval already in place.

2.3. Human skeletal remains

The *Sydney Metro Exhumation Management Procedure* provides a more detailed explanation of the approval processes related to human skeletal remains.

Human skeletal remains can be classified as:

- reportable deaths
- Aboriginal objects; or

- relics

Where it is suspected that less than 100 years has elapsed since death, human skeletal remains come under the jurisdiction of the State Coroner and the *Coroners Act 2009* (NSW). Under s35(2) of the Act, a person must report a 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 old regardless of ancestry. Public health controls may also apply.

Where the remains are suspected of being more than 100 years old, they are considered to be either Aboriginal objects or non-Aboriginal relics, depending on the ancestry of the individual. Aboriginal human remains are protected under the NPW Act, while non-Aboriginal heritage remains are protected under the Heritage Act.

The discovery of Aboriginal human remains also triggers notification requirements to the Commonwealth Minister for the Environment under s20 (1) of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

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 appropriately protected and investigated, the relevant authorities notified and approvals received.

3. Unexpected heritage finds procedure

In the event that an unexpected find is encountered on a Sydney Metro project, the steps summarised in Figure 1 and detailed in Table 1 must be followed. There are seven steps in the procedure.

IMPORTANT!

Sydney Metro may have approval to impact 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** work and follow this procedure.

Figure 1: Summary of steps to be taken on the discovery of an unexpected heritage item

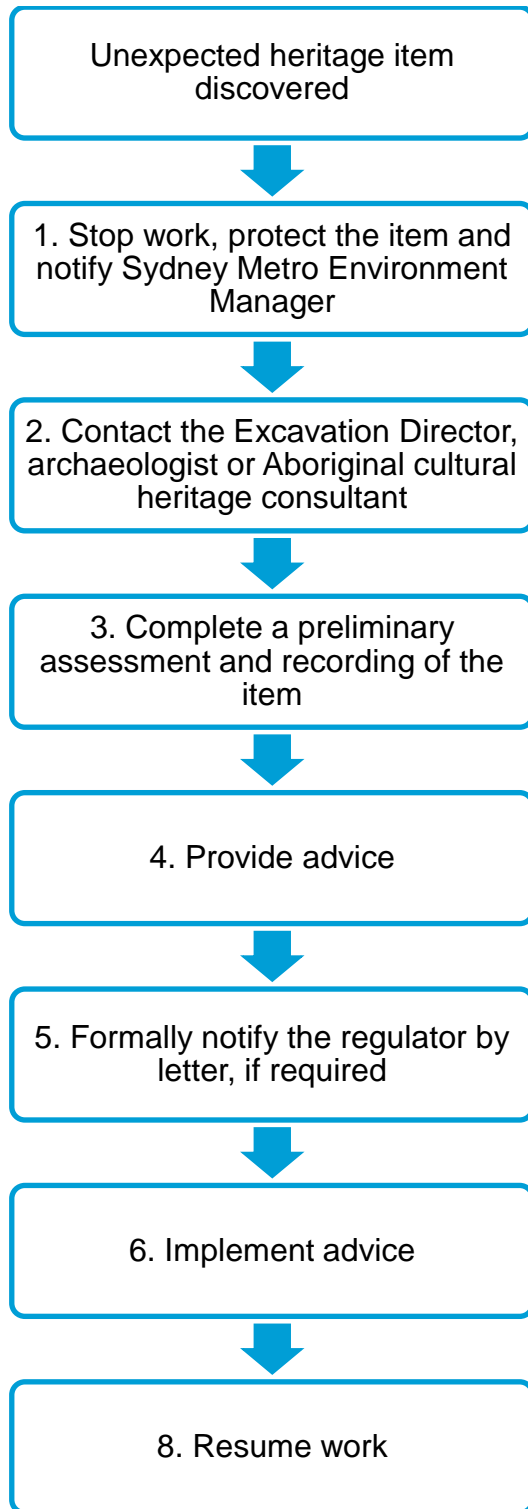


Table 1: Specific tasks to be implemented following the discovery of an unexpected heritage item

Step	Task	Responsibility	Guidance and tools
1	Stop work and protect the item		
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 ground disturbing work is to be undertaken within this zone until further archaeological investigations are completed, and if required, appropriate approvals are obtained. Inform all on-site personnel about the no-go zone.	Contractor's Project Manager or Supervisor	
2	Engage an archaeologist		
2.1	Contact the nominated Excavation Director, archaeologist or Aboriginal cultural heritage consultant to discuss the location and nature of the item and arrange an inspection. The project CEMP should contain the contact details of the archaeologist. Provide as much information as possible to the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, including photographs of the item. Inform the Sydney Metro Environment Manager, and keep them involved in the process. The Environment Manager will inform the Sydney Metro Senior Heritage Advisor.	Contractor's Project Manager	
2.2	Where there is no project Excavation Director, archaeologist or Aboriginal cultural heritage consultant engaged for the work, engage a suitably qualified consultant to assess the find. If the find is likely to be an Aboriginal object, engage a suitably qualified and experienced Aboriginal cultural heritage consultant. If the find is a non-Aboriginal heritage item, engage a suitably qualified and experienced historical archaeological consultant.	Contractor's Project Manager	

Step	Task	Responsibility	Guidance and tools
3	Preliminary assessment and recording		
3.1	<p>Occasionally, the Excavation Director, archaeologist or Aboriginal cultural heritage consultant may determine from the photographs provided at Step 2.1 that it is not necessary to inspect the item because no heritage constraint exists for the project (for example the item is not an Aboriginal object or archaeological relic).</p> <p>This advice should be provided in writing (for example via email or letter with the consultant's name and company clearly identifiable) to the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	Proceed to Step 7
3.2	<p>Arrange access for the Excavation Director, archaeologist or Aboriginal cultural heritage consultant to inspect the item as soon as practicable. In most cases, a site inspection is required to conduct a preliminary assessment.</p>	Contactors Project Manager / Excavation Director	
3.3	<p>Subject to the Excavation Director, archaeologist or Aboriginal cultural heritage consultant's assessment, work may recommence at a set distance from the item. This is to protect any other archaeological evidence that may exist in the vicinity, which may have not yet been uncovered.</p> <p>The 'no-go zone' established in Step 1.2 may need to be adjusted to reflect the area of archaeological potential, as determined by the Excavation Director, archaeologist or Aboriginal cultural heritage consultant.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
3.4	<p>Has the item been damaged or harmed?</p> <p>If yes, record the incident in the Incident Management System. Implement any additional reporting requirements related to the planning approval and CEMP where relevant</p>	Contractors Project Manager / Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
3.5	<p>Can the work avoid further impact to the item?</p> <p>Project Manager to confirm with Sydney Metro Environment Manager.</p>	Contractors Project Manager	

Step	Task	Responsibility	Guidance and tools
3.6	Record the item and complete the Unexpected Heritage Item Recording Form.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	<p>Appendix 2 Unexpected Heritage Item Recording Form</p> <p>Appendix 3 Photographing Unexpected Heritage Items</p>
3.7	<p>Is the item likely to be bone?</p> <p>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 Procedure.</p> <p>If no, proceed to the next step.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
3.8	<p>The Excavation Director, archaeologist or Aboriginal cultural heritage consultant may provide advice after the inspection and preliminary assessment that no heritage constraint exists for the project (for example the item is not an Aboriginal object or relic).</p> <p>This advice should be provided in writing (for example via email or letter with the consultant's name and company clearly identifiable) to the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	Proceed to Step 7
3.9	Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains). The Excavation Director, archaeologist or Aboriginal cultural heritage consultant can provide contacts for such specialist consultants.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
4	Provide advice		
4.1	The Excavation Director, archaeologist or Aboriginal cultural heritage consultant should provide written advice with input from Registered Aboriginal Parties where appropriate. The plan should include as a minimum a) a description of the item, b) an assessment of the significance of the item, c) approval or statutory notification requirements, d) reporting requirements, e) consultation requirements, and f) relevance	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	<p>Appendix 4 Archaeological / heritage advice checklist</p> <p>Other references DECCW 2010, Aboriginal Cultural Heritage Consultation</p>

Step	Task	Responsibility	Guidance and tools
	to other project approvals or management plans.		<p>Requirements for Proponents 2010</p> <p>DECCW 2010, Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</p> <p>Heritage Branch 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'</p>
4.2	<p>In preparing the advice, the Excavation Director, archaeologist or Aboriginal cultural heritage consultant must review the CEMP, heritage sub-plans, conditions of project approval and associated heritage assessment documentation (for example an Environmental Impact Statement Technical Paper).</p> <p>The Excavation Director, archaeologist or Aboriginal cultural heritage consultant must determine if the item is consistent with previous heritage or project approvals or management plans. The Project Manager must provide all relevant documents to the Excavation Director to assist with this.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
4.3	The Excavation Director, archaeologist or Aboriginal cultural heritage consultant must submit this advice as a report, letter or email to the Project Manager as soon as practicable.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
4.4	The Project Manager, Sydney Metro Environment Manager and Sydney Metro Senior Heritage Advisor should review the advice to ensure that all requirements are addressed and can be reasonably implemented.	Consultant's Project Manager / Sydney Metro Environment Manager / Sydney Metro Senior Heritage Advisor	
5	Notify the regulator, if required		
5.1	<p>Based on the advice and any statutory requirements, is notification to Heritage NSW and the Secretary required?</p> <p>If no, proceed directly to Step 6.</p> <p>If yes, proceed to next step.</p>	Sydney Metro Environment Manager / Sydney Metro Senior Heritage Advisor	

Step	Task	Responsibility	Guidance and tools
5.2	If notification is required, complete the template notification letter and forward with supporting documentation (including advice obtained at Step 4) to the Sydney Metro Environment Manager. The Environment Manager will seek the approval of the Sydney Metro Senior Heritage Advisor and the signature of the Director Project Environment, Sustainability & Planning or Director Environment, Sustainability & Planning	Sydney Metro Environment Manager	Appendix 5 Template Notification Letter
5.3	<p>Forward the signed notification letter to Heritage NSW once approved and cc Sydney Metro.</p> <p>Informal notification (via a phone call or email) to Heritage NSW prior to sending the letter is appropriate.</p> <p>The advice and completed Unexpected Heritage Item Recording Form (Appendix 2) must be submitted with the notification letter (for both Aboriginal objects and non-Aboriginal relics).</p> <p>If the item is an archaeological relic as defined under the Act, a section 146 notification form must also be completed and sent to Heritage NSW as part of the notification.</p>	Sydney Metro Environment Manager	<p>Appendix 2 Unexpected Heritage Item Recording Form</p> <p>Appendix 5 Template Notification Letter</p>
5.4	A copy of the final signed notification letter, archaeological or heritage management plan and the Unexpected Heritage Item Recording Form is to be kept on file and a copy sent to the Sydney Metro Project Manager	Sydney Metro Environment Manager / Contractor's Project Manager	
6	Implement advice		
6.1	The advice should be modified to take into account any additional advice resulting from notification and discussions with the regulator if required.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.2	Implement advice. Where impact cannot be avoided, this could include a formal assessment of heritage significance and impact assessment, preparation of excavation or recording methodologies, consultation with Registered Aboriginal Parties and obtaining heritage approvals if required.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	<p>DECCW 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</p> <p>DECCW 2010, Code of Practice for the Archaeological Investigation of</p>

Step	Task	Responsibility	Guidance and tools
			Aboriginal Objects in NSW
6.3	Where heritage approvals are required, contact the Sydney Metro Environment Manager for further advice and support. Please note there are time constraints associated with heritage approval preparation and processing.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.4	For SSI or SSD projects, or projects approved under Part 5 of the EP&A Act, assess whether the heritage impact is consistent with the project approval or if project approval modification is required from the Department of Planning, Industry and Environment or the relevant consent authority.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.5	Where statutory approvals (or project modifications) are required, impact upon Aboriginal objects or relics must not occur until heritage and planning approvals have been issued by the appropriate regulator.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.6	Where statutory approval is not required but where recording is recommended by the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, sufficient time and resources must be allowed for this to occur.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.7	Ensure short term and permanent storage locations are identified for archaeological material or other heritage material recovered from site, where required. Interested third parties (for example local Aboriginal land councils, local councils or museums) should be consulted on this issue. Contact the Excavation Director, archaeologist or Aboriginal cultural heritage consultant for advice on this issue.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
7	Resume work		
7.1	Seek written clearance to resume project work from the Excavation Director, archaeologist or Aboriginal cultural heritage consultant. Clearance would only be given once all archaeological excavation or heritage recommendations and approvals (where required) are complete. Resumption of	Contractor's Project Manager	



Step	Task	Responsibility	Guidance and tools
	project work must be in accordance with all the relevant project and heritage approvals / determinations.		
7.2	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.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
7.3	If additional unexpected heritage items are discovered, this procedure must begin again from Step 1.	All	

4. Responsibilities

Table 2: Roles and responsibilities

Role	Responsibility
Contractor / Supervisor	<p>Stop work immediately when an unexpected heritage item is encountered. Cordon off area until Contractor Environmental Manager / Excavation Director, archaeologist or Aboriginal cultural heritage consultant advises that work can recommence.</p> <p>Manage the process of the identification, protection and mitigation of impacts on the heritage item.</p> <p>Liaise with the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p> <p>Assist the Excavation Director, archaeologist or Aboriginal cultural heritage consultant with mitigation and statutory requirements.</p> <p>Complete Incident Report and review CEMP for any changes that may be required. Proposed amendments to the CEMP if any changes are required.</p>
Contractor’s Project Manager	<p>Ensure all aspects of this procedure are implemented. Advise the Contractor / Supervisor to recommence work if all applicable requirements have been satisfied and the Contractor Environmental Manager/ Excavation Director, archaeologist or aboriginal cultural heritage consultant has approved recommencement of work.</p>
Contractor’s Excavation Director / archaeologist or Aboriginal cultural heritage consultant	<p>Provide expert advice to the Contractor and Sydney Metro Environment Manager on find identification, significance, mitigation, legislative procedures and requirements.</p>
Environmental Representative	<p>Ensure compliance with relevant approvals (new and existing) and the Construction Environment Management Plan.</p>
Sydney Metro Environment Manager	<p>Notify the Director Project Environment, Sustainability & Planning of find and help support Contractor with managing Incident Reporting.</p>
Sydney Metro Senior Heritage Advisor	<p>Provide expert advice to Sydney Metro Environment Manager and project as required.</p>

5. Seeking advice

Advice on this procedure should be sought from the Sydney Metro Environment Manager in the first instance. Contractors and delivery 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.

6. Related documents and references

Related documents and references

- SM ES-PW-315/5.0 Sydney Metro Exhumation Management Procedure
- SM-17-0000096 Sydney Metro Environmental Incident Classification and Reporting
- 3TP-SD-015/7.0 Transport for NSW Guide to Environmental Control Map
- Roads and Maritime Services, November 2015, Unexpected Heritage Items Heritage Procedure 02
- [SM-17-0000203 Sydney Metro glossary](#)
- Department of Environment, Climate Change and Water 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010
- Department of Environment, Climate Change and Water 2010, Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW
- Heritage Branch Department of Planning 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'

7. Superseded documents

Superseded documents

Sydney Metro Unexpected Heritage Finds Procedure v3.3

8. Document history

Version	Date of approval	Notes
1.1	June 2017	Incorporates Environmental Representative comments
1.2		Amends p13 step 8 reference to s146
1.3		Incorporates Planning Mods 1-4 including amended CoA E20
1.4	March 2018	Incorporates Environmental Representative comments
2.0		Removes SSI 15-7400 COA reference
3.0		Revises definitions
3.1		Revises procedure
3.2		Revises roles and responsibilities
3.3		Minor edits and corrections
4.0	April 2021	Revises definitions and procedure; references the Sydney Metro Exhumation Management Procedure v5 with amendments throughout for consistency with that document.
4.1	April 2021	Updates to related documents and references.

Appendix 1: Examples of unexpected heritage finds



Plate 1: Aboriginal stone artefacts found at the Wickham Transport Interchange, 2015



Plate 2: Aboriginal artefacts (shell material) found at the Wickham Transport Interchange, 2015



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



Plate 4: Sandstone pavers uncovered at Balmain East, 2016



Plate 5: Platform at Hamilton Station classified as a ‘work’ by the project archaeologist, Wickham Transport Interchange project, 2015



Plate 6: Sandstone flagging and cesspit, Wynyard Walk project, 2014



Plate 7: Chinese Ming Dynasty pottery and English porcelain / pottery dating back to the early nineteenth century, Wynyard Walk project, 2014



Plate 8: 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 Unexpected Heritage Items Heritage Procedure 02.



Plate 9: 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)



Plate 10: Culturally modified stone discovered on Main Road 92, about two kilometres west of Sassafras. The remaining images shown a selection of stone artefacts retrieved from test and salvage archaeological excavations during the Hume Highway Duplication and Bypass projects from 2006-2010.

Appendix 2: Unexpected Heritage Find Recording Form

This form is to be completed by the Excavation Director on the discovery of an archaeological heritage find 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 <i>(What type of item is it likely to be? Tick the relevant boxes).</i>			
A. A relic	<input type="checkbox"/>	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'	<input type="checkbox"/>	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	<input type="checkbox"/>	An 'Aboriginal object' may include stone tools, stone flakes, shell middens, rock art, scarred trees and human bones	
D. Bone	<input type="checkbox"/>	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	<input type="checkbox"/>		
Provide a short description of the item <i>(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).</i>			

<p>Sketch <i>(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)</i></p>			
<p>Action taken (Tick either A or B)</p>			
<p>A. Unexpected item would not be further impacted on by the works</p>	<input type="checkbox"/>	<p>Describe how works would avoid impact on the item. (E.g. the rail tracks would be left in situ and recovered with paving).</p>	
<p>B. Unexpected item would be further impacted by the works</p>	<input type="checkbox"/>	<p>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.)</p>	
<p>Excavation Director, archaeologist or Aboriginal cultural heritage consultant</p>		<p>Name</p>	
		<p>Signature</p>	

IMPORTANT

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

Appendix 3: Photographing unexpected heritage items

Photographs of unexpected finds 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.

Photographing distinguishing features



Figure 2: Close up detail of the sandstone surface showing material type, formation and construction detail. This is essential for establishing date of the feature.

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 be 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 5 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: Archaeological / heritage advice checklist

The archaeologist/Aboriginal heritage consultant must provide advice to the Sydney Metro Environment Manager and Senior Advisor Heritage as soon as possible after an inspection of the site has been completed. This advice 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, section 60, exemptions etc.	Yes/No	
• Regulator Aboriginal objects / relics notification	Yes/No	
• Notification to the appropriate agency for s170 heritage conservation register	Yes/No	
• Compliance with CEMP or other project heritage approvals	Yes/No	
Stakeholder consultation		
• Consultation with Registered Aboriginal Parties	Yes/No	
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 5: Template notification letter

Note: Notification of the discovery of a relic is required under section 146 of the Heritage Act 1977. The notification should be submitted through the Heritage Management System (HMS).

Insert on Sydney Metro letterhead

[Name]

Heritage NSW

[Address]

[Select and type salutation and name],

Re: Unexpected heritage item discovered during Sydney Metro activities

I write to inform you of an unexpected [select: Aboriginal object / relic] found during Sydney Metro activities at [insert location] on [insert date] in accordance with the notification requirement under select: [NPW Act, 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). 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 Heritage NSW 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 [add contact number].

Yours sincerely

[Name]

Sydney Metro Director, Environment, Sustainability & Planning

[Attach the advice from the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, completed recording form and section 146 notification]



Exhumation Management Procedure

SM ES-PW-315/5.0

Metro Body of Knowledge (MBoK)

Applicable to:	Sydney Metro
Document Owner:	Senior Heritage Advisor
System Owner:	Environment, Sustainability & Planning
Status:	Final
Version:	5.1
Date of issue:	May 2021
Review date:	May 2022
© Sydney Metro 2021	

Table of contents

1.	Introduction	3
1.1.	Purpose and scope.....	4
2.	Overview of legislative requirements for dealing with human remains	5
2.1.	Discovery of human remains and forensic cases: <i>NSW Coroners Act 2009</i>	5
2.2.	Historic human remains: <i>Heritage Act 1977</i> and <i>Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977</i>	6
2.3.	Aboriginal human remains: <i>National Parks and Wildlife Act 1974</i>	6
2.4.	Exhumation of human remains: <i>Public Health Regulation 2012 (NSW)</i>	7
2.5.	NSW Ministry of Health Policy Statement – Exhumation of human remains (2013).....	7
2.6.	<i>Work Health and Safety Act 2011</i>	7
3.	Sydney Metro procedure for the discovery and management of human remains	8
3.1.	Initial discovery of bones: What do we do?	8
3.2.	Archaeological exhumation methodology.....	10
3.3.	Resume work.....	12
3.4.	Reporting.....	12
4.	Excavation and post-excavation tasks	14
4.1.	Research questions	14
4.2.	Process for DNA testing, isotope analysis and environmental sampling ..	15
4.3.	Reporting.....	16
4.4.	Public involvement.....	16
4.5.	Temporary storage and permanent repository or resting place for remains.....	16
5.	Definitions	17
6.	Accountabilities	17
7.	Related documents and references	18
8.	Superseded documents	18
9.	Document history	18
Appendix 1		19
	NSW Health Policy Directive for Exhumation of Human Remains	19
Appendix 2		21
	NSW Health Permit Application	21

Figures

Figure 1 Sydney Metro project overview and station locations	4
Figure 2 Exhumation procedure flow chart.....	13

1. Introduction

Sydney Metro has developed this Exhumation Management Procedure (ExMP) to provide guidance for managing the discovery of human skeletal remains during the course of works. The procedure is applicable to both unexpected skeletal finds and controlled archaeological investigations where human remains are anticipated to be uncovered. The procedure is applicable to any and all stages of any Sydney Metro project and to all staff and contractors.

Sydney Metro is Australia's biggest public transport project. In 2024, Sydney will have 31 metro stations and more than 66 km of new metro rail, revolutionising the way Australia's biggest city travels. When Sydney Metro is extended into the central business district (CBD) and beyond in 2024, metro will run from Sydney's booming North West region under Sydney Harbour, through new underground stations in the CBD and beyond to the south west (refer to Figure 1).

The purpose of this ExMP is to provide a clear and concise process to follow in the event of the discovery of potential human remains during Sydney Metro activities.

This ExMP will be reviewed as required and prior to any future Sydney Metro project that has potential to impact on known burials, graves, cemeteries or burial grounds. A review may require amending the ExMP to tailor additional controls or management procedures that are specific to the impacted cemetery or burial ground. In addition, the requirements of the relevant Planning Approval will be assessed during the review of this ExMP prior to its implementation.

This ExMP should be read in conjunction with the Sydney Metro Unexpected Finds Procedure.

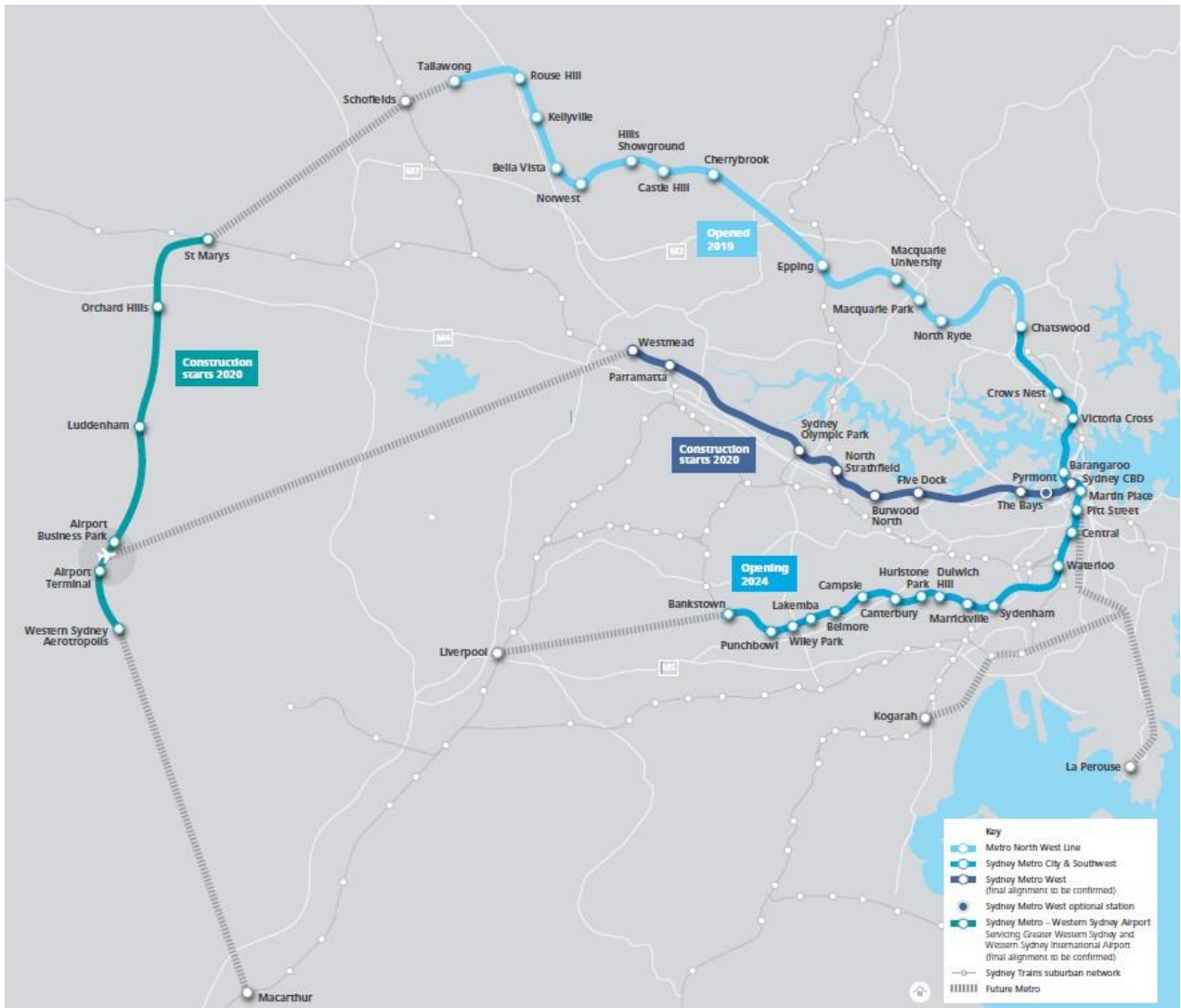


Figure 1 Sydney Metro project overview and station locations

1.1. Purpose and scope

This ExMP outlines the procedure for the management of the discovery of human remains within the Sydney Metro program. It includes:

- Overview of legislative requirements for dealing with human remains (e.g. *Coroners Act 2009*, *Heritage Act 1977*, *Guidelines for the Management of Human Skeletal Remains 1988*, and the *Public Health Regulations 2012*).
- A flow chart process to be followed when human remains are uncovered
- An archaeological methodology for the excavation of remains including processes for appropriately handling remains in accordance with the relevant guidelines (see section 2.3 and 2.4 below).
- Post-exhumation management processes including relocation, processing and long-term arrangements.

- Process for nomination of a physical anthropologist and temporary storage location.
- Process for additional analysis including DNA testing, isotope analysis and environmental sampling, and discussion on requirements for public involvement.

2. Overview of legislative requirements for dealing with human remains

The following section provides an overview of the legislation that would apply to the discovery, management and relocation of human remains. A discovery of suspected human remains may be subject to different Acts and requirements, thereby triggering different notification pathways based on the specific circumstances involved.

The first step will always be to notify the NSW Police. Confirmation of the age (antiquity) and nature of the skeletal remains as well as the reasons for the disturbance will dictate which Act and provisions will be applicable.

2.1. Discovery of human remains and forensic cases: NSW Coroners Act 2009

For a discovery of suspected human remains less than 100 years old, the remains would come under the jurisdiction of the State Coroner and the NSW *Coroners Act 2009*. Such a case would be considered a 'reportable death' and, under legal notification obligations set out in s35 (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 old, regardless of ancestry (i.e. both Aboriginal and non-Aboriginal remains).

35 Obligation to report death or suspected death

(1) *This section applies to any person who has reasonable grounds to believe that a death or suspected death of another person:*

(a) *is a reportable death or occurred in circumstances that would be examinable under Division 2 of Part 3.2, and*

(b) *has not been reported in accordance with subsection (2).*

(2) *A person to whom this section applies must report the death or suspected death concerned to a police officer, a coroner or an assistant coroner as soon as possible after becoming aware of the grounds referred to in subsection (1).*

Maximum penalty (subsection (2)): 10 penalty units.

(3) *A police officer to whom a death or suspected death is reported under this section is required to report the death or suspected death to a coroner or assistant coroner as soon as possible after the report is made.*

(4) *An assistant coroner to whom a death or suspected death is reported under this section is required to report the death or suspected death to a coroner as soon as possible after the report is made.*

(5) *A coroner to whom a death or suspected death is reported under this section is required to inform the State Coroner of the report as soon as practicable after the report is made.*

2.2. Historic human remains: *Heritage Act 1977 and Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977*

The *Heritage Act 1977* (Heritage Act) and *Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977*¹ (the Guidelines) apply to historic burials in New South Wales. It should be noted that the Guidelines are outdated in terms of the current statutory framework.

A relic is defined as an archaeological deposit or artefact that has heritage significance at a local or State level. The guidelines, *Assessing Significance for Historical Archaeological Sites and Relics*², have been endorsed by the Heritage Council of NSW and should be used to assess the level of heritage or archaeological significance of the remains. With reference to burial grounds, objects such as headstones, grave enclosures and grave goods, as well as buried human remains, may be 'relics' under the Heritage Act.

Approval under the Heritage Act and the *National Parks and Wildlife Act 1974* (NPW Act), is not required if human remains are uncovered during a Critical State Significant Infrastructure (CSSI) project. However, notification to the Heritage Council under s146 of the Heritage Act, and notification of an Aboriginal object under the NPW Act is required if human remains are uncovered during archaeological or other project related investigations.

2.3. Aboriginal human remains: *National Parks and Wildlife Act 1974*

The NPW Act, administered by Heritage NSW, provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) under Section 90 of the Act, and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community) under Section 84.

Discovery of Aboriginal burials and/or human remains would be addressed in the projects Aboriginal Cultural Heritage Assessment Report (ACHAR). ACHARs would be prepared in accordance with the following Heritage NSW guidelines:

- *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation*³,
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*⁴,
- *Aboriginal cultural heritage consultation requirements for proponents 2010*⁵,
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*⁶.

¹ NSW Heritage Office, 1998

² Heritage Branch of the Department of Planning, 2009

³ NSW Department of Environment and Conservation, 2005

⁴ Office of Environment and Heritage, 2011

⁵ Department of Environment, Climate Change and Water, 2010

⁶ Office of Environment and Heritage, 2010

If suspected human skeletal remains are uncovered at any time during the archaeological management program, the process outlined in this ExMP and detailed in the flow chart is to be followed. Management of the remains would be guided by consultation with the nominated Registered Aboriginal Parties (RAPs) for the project, in adherence to the ACHAR.

2.4. Exhumation of human remains: *Public Health Regulation 2012 (NSW)*

Public Health Regulation 2012 and the *NSW Health Policy Statement – Exhumation of human remains of the Public Health Regulation 2012* provides specific regulation for the exhumation of human remains in NSW.

Under Clause 70 of the Regulation, an application for approval to exhume the remains of a dead person may be made to the Director-General via an approved form to the Director of the Local Public Health Unit that acts on behalf of the Director-General of NSW Health. Exhumation is not to take place unless an authorised officer or a NSW Health member of staff is present at the exhumation (the grave may be excavated to the lid of the coffin but nothing must be disturbed until the arrival of the authorised officer) (Clause 72). An authorised officer must be present at the exhumation to ensure the correct interment procedure is followed and that all of the remains are exhumed, and to enforce the protection of public health should this be necessary.

2.5. NSW Ministry of Health Policy Statement – Exhumation of human remains (2013)

The NSW Ministry of Health *Policy Statement on the exhumation of human remains* provides the policy to be observed by Public Health Units located in Local Health Districts on receipt of an application to seek permission for approval of the exhumation of human remains under the *Public Health Regulation 2012*. Public Health Units (PHUs) of Local Health Districts (LHDs) in NSW facilitate the approval for an exhumation.

Under Clause 69 a person must not exhume a body unless the exhumation of the remains has been approved by the Director-General. An application for permission to exhume the remains of a deceased person is to be made to the Public Health Unit on the approved form which is available at the [NSW Health website](#) and included in Appendix 2.

Note that the title of Director General of Health was replaced with the Secretary of Health when the Public Health Act and Public Health Regulation were amended. However, the Policy Directive PD2013-046 has not been amended to reflect this change.

2.6. *Work Health and Safety Act 2011*

The *Work Health and Safety Act 2011* provisions apply to protect personnel involved in the exhumation procedure by creating and maintaining safe and healthy work practices and are enforced by WorkCover NSW. Graves, crypts and vaults could be considered to be confined spaces in some circumstances under health and safety legislation. More information on safe work practices is available at or by contacting SafeWork NSW via their website or directly.

Health and safety aspects of working with human remains should be considered. Generally, working with archaeological human skeletal remains requires no extra precautions to be taken beyond normal health and safety regulations. Once any necessary site health and safety precautions have been taken, the exhumation of human remains can proceed.

3. Sydney Metro procedure for the discovery and management of human remains

This procedure provides project managers, principal contractors and the Project Excavation Director with advice on the steps to follow when suspected human remains are uncovered. Information on the potential for burials and human remains where known would be included in the general project induction for all personnel. The general project induction would also include the procedure to manage human remains set out in this ExMP.

3.1. Initial discovery of bones: What do we do?

To avoid doubt, all suspected bone items must be treated as potential human skeletal remains, and work in the immediate vicinity must stop while they are protected and investigated as a matter of urgency.

Stop Work and preliminary notification

If bone is uncovered, all work in the vicinity of the find must stop to allow for a positive identification as either human or non-human bone.

The Project Excavation Director must be notified.

Preliminary notification must be made to the NSW Police in compliance with Section 35 of the *Coroners Act 2009* (also refer to special conditions for Central Station noted in section 4).

What?	When bones are uncovered at a site, all work in the area of the find must stop immediately and the site must be secured.
Who?	The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notifying the foreman/site supervisor, principal contractor, project archaeologist/Excavation Director and Sydney Metro Environmental Manager. Preliminary notification to the NSW Police will be undertaken by the Excavation Director. Notification should provide verbal description of the remains and inform the police that consultation with technical specialists is being undertaken to confirm that the remains are human, as well as the burial context (archaeological or less than 100 years old, refer Step 2).
How?	Inform all site personnel of restricted access to the area of the discovery until further notice. Area must be fenced off (flagging or temporary exclusion fencing).
Actions	Notify site supervisor, principal contractor, Project Archaeologist / Excavation Director and Sydney Metro Environmental Manger of the find and protect the suspected remains until an initial assessment can be undertaken by a technical specialist. Preliminary notification to NSW Police by Sydney Metro Environmental Manager.

Confirm the remains are human

Skeletal remains could either be articulated and in a recognisable form of burial such as a coffin or common burial position of the body (e.g. supine, prone or flexed), or they could be disarticulated or fragmented remains. Within the boundaries of a known historic burial ground, there is a high probability of the remains being human. In a suspected forensic case (less than 100 years old), the remains may have clothing and/or human tissue. Disarticulated or fragmented bones are often uncovered and these may require specialist assessment to determine legal jurisdiction.

If suspected human remains are identified during the course of project works, preliminary notification must be made to the NSW Police in compliance with Section 35 of the *Coroners Act 1999* (refer Step 1). NSW Police would be contacted immediately upon receipt of confirmation of human provenance.

What?	Confirmation that the remains are human, their burial context - whether they are forensic (less than 100 years) or archaeological (older than 100 years) and suspected ancestry (Aboriginal or non-Aboriginal).
Who?	Excavation Director and or Forensic or physical anthropologist, or archaeologist with specialist skills such as an osteoarchaeologist. Notification to the NSW Police will be undertaken by the Sydney Metro Environmental Manager.
How?	Consultation could be undertaken as either an on-site inspection or via good quality photos sent to the nominated technical specialist of 1) the remains; and 2) the site general site location of the discovery.
Actions	Contact nominated technical specialists to confirm that the remains are: a) human, b) burial context (archaeological or forensic), and c) suspected ancestry (Aboriginal or non-Aboriginal). For the duration of the Sydney Metro project, the nominated technical specialists are: <ul style="list-style-type: none"> • Forensic Anthropologist – TBC by contractor for project area. • Nominated Excavation Director – TBC by contractor for project area. • Sydney Metro Environmental Manager to conduct and or oversee liaison with NSW Police. The archaeologist may be able to identify the nature of remains without input from the Forensic Anthropologist. The Forensic Anthropologist should be contacted as required.

Notification based on jurisdiction (forensic or archaeological)

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.

What?	<i>Forensic case:</i> remains are less than 100 years old
Who?	If it is determined by specialist assessment (Step 2) that the remains are forensic, the remains come under the jurisdiction of the State Coroner and the Coroners Act 2009.
How?	The NSW Police would likely secure the site and will advise on the procedure to be followed.
Actions	Environmental Manager to liaise with NSW Police

What?	<i>Archaeological – non-Aboriginal human remains</i> – more than 100 years old.
Who?	Follow the Archaeology Exhumation Methodology as set out in Step 4 below

How?	Follow the Archaeology Exhumation Methodology as set out in Step 4 below
Actions	Follow the Archaeology Exhumation Methodology as set out in Step 4 below

What?	<i>Archaeological – suspected Aboriginal human remains – more than 100 years old.</i>
Who?	Recording of Aboriginal ancestral remains must be undertaken by, or conducted under the direct supervision of a specialist with registered Aboriginal parties (RAPs) present.
How?	The RAPs must be present where it is reasonably suspected that Aboriginal burials or human remains have been encountered.
Actions	Notify RAPs and Heritage NSW and follow the Aboriginal cultural heritage assessment report (ACHAR). Follow the Archaeology Exhumation Methodology as set out in Step 4.

3.2. Archaeological exhumation methodology

The following section provides a broadly accepted archaeological methodology for exhumation and the appropriate handling of human remains.

Securing the site

The strategy for the excavation and removal of human remains must be sensitive to public opinion and ethics and exhumation activities should not be visible to the general public. The site may need to be screened off from public areas, not only with hoarding but also in some cases with a roof to screen the site off from overlooking buildings. At all times, human remains should be treated respectfully. The perimeter of the excavation site should be demarcated by plastic tape or flagging, with only technical staff allowed within this area for the duration of exhumation activities.

The site should be protected from the elements including flooding, contamination with dust or debris, and other disturbance. These measures would be formulated by the Excavation Director in consultation with the contractor and Sydney Metro where required and may differ from site to site.

Excavation Director

Archaeological investigations are to be managed by a suitably qualified Excavation Director with experience in the excavation and management of human remains. For sites with potential for locally significant remains, the Excavation Director should meet the NSW Heritage Council criteria for experience with locally significant archaeological sites. For sites with potential for State significant archaeology the Excavation Director should meet the Heritage Council of NSW criteria for experience with State significant archaeological sites.

Excavation and recording

Exhumation and recording is to be undertaken in accordance with best practice forensic and Heritage Council of NSW guidelines. Prior to removal, the remains should be fully recorded in situ to understand their surrounding archaeological context. This will include recording any disturbances to the burial and the identification of bones present. In some cases, the deposit

of bones may be a mixture of articulated and disarticulated remains. Care should be taken to distinguish articulated remains and to assess if they represent commingled individuals or disturbed remains belonging to one individual, and to record them accordingly.

Recording

- A standard context recording system is to be employed.
- Detailed survey and/or measured drawings are to be prepared and include location of remains within the overall site (position of the body, the direction of the burial, noting any stratigraphic relationships with other archaeological features).
- Any associated artefacts (potential grave goods, burial furniture) are to be recorded and collected by context for later analysis.
- Photographic record of all phases of work in accordance with 'Photographic Recording of Heritage Items Using Film and Digital Capture'. Photographs are to be in RAW format, using photographic scales and photo boards where appropriate.
- Registers of contexts, photos, samples and drawings are to be kept.

Excavation

- Detection of the extent of the grave/remains (if disarticulated).
- Surface soils removed in excavation units of 100mm (site dependent) using small hand tools.
- Expose remains with soft paint brushes and pedestal the remains.
- Record position and depth of remains.
- Soil removed is to be sieved through 3mm mesh to examine for teeth and bone fragments.
- Soil samples may be taken from the abdominal and/or chest areas of the body (articulated remains) to retrieve further evidence.
- Exhumation must be under the control of the Excavation Director, with the assistance of a Forensic Anthropologist if required. Exhumation permit/s, provided by NSW Ministry of Health may also require the presence of an authorised officer or a member of staff of the Ministry of Health.
- Further excavation of the bottom of the pit (grave) following removal to confirm the absence of further remains.

Relocation of bones

- Removal and collection of skeletal remains is to follow the standard forensic practice of labelling as follows:
 - Remove remains from the ground systematically and place in plastic bags according to anatomical areas of the body.
 - Bags should not be air-tight and should have ventilation holes to prevent deterioration of fragile skeletal material. Each bag should contain labels and the separate bags should then be placed in a large plastic bag, crate or box, labelled with the context information.
 - The remains should be placed in a sturdy, large cardboard box (approximately 600 x 300 x 200 mm) for relocation to off-site processing location.

3.3. Resume work

Construction work may only recommence upon receipt of clearance certificate from the Excavation Director and may require additional NSW Ministry of Health approval. If a forensic case, written authorisation from the NSW Police is required.

3.4. Reporting

A report would be prepared following the completion of the program of exhumation works, separate to the archaeological excavation report for the project. This report would include skeletal analysis catalogue, comprehensively describe the process of exhumation, detail the recording of the remains and synthesise the results of any further laboratory testing. An assessment of significance for the remains would be provided and interpreted within the context of the archaeological research design (response to research questions).

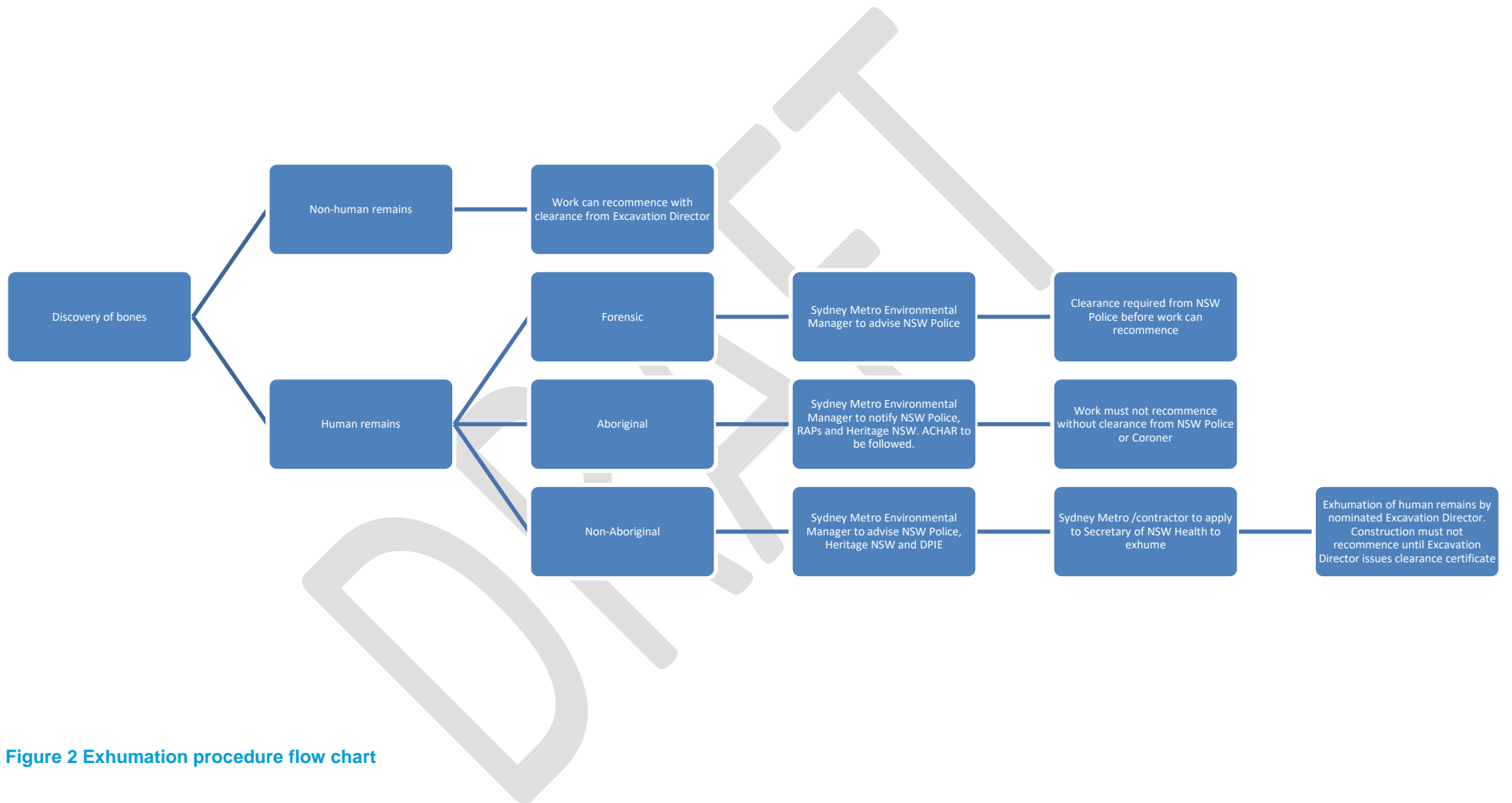


Figure 2 Exhumation procedure flow chart

4. Excavation and post-excavation tasks

All on-site management should be in accordance with the archaeological research design (ARD) and relevant archaeological method statement (AMS), and be overseen by the Excavation Director. The Excavation Director would nominate a Forensic Anthropologist where required.

4.1. Research questions

Research questions should be specific to the site and the site history. The research questions in the archaeological research design can be revised as new information emerges and new research questions can be investigated.

The following general research questions can be used to guide exhumations, should intact burials, disarticulated remain, burial cuttings or associated material culture be uncovered during work.

Social history and burial practices

- Does the location of the burial/burial cutting correspond with historic plans/descriptions?
- Is there evidence of exhumation?
- Do graves cut into older ones? What can this tell us about nineteenth century burial practices, and how does this compare to other excavated cemetery sites in the region?
- What is the distance between burials (if multiple burials uncovered)? Does this conform to known nineteenth century burial practices?
- What type of fill was used within grave cuttings? What can this tell us about the surrounding environment and burial practices at the time?
- What materials/tree species were used in the coffin manufacture? Can coffin manufacturing techniques or fastening methods (use of mortar, screws, nails, tacks) be identified? Does this match known burial practices of the time? If alternative methods are identified, what can this tell us about the manufacturer or economic/social landscape?
- Can the class or rank of the individual be identified via coffin materials, grave goods or clothing/shrouds?
- Which direction is the burial orientated? How does this correspond with the known/hypothesised location of denomination areas?
- If the burial is associated with more than one individual, can a familial relationship be assessed through DNA or other genetic markers identifiable within the skeletal remains?

Environmental factors and scientific analysis

- What is the condition of the bones? How does their condition compare to known or nearby burials of the same age? What environmental or human factors may have influenced the decomposition process?
- Can the health, nutrition, sex, race, stature or age be identified through the skeletal remains? Is there evidence of trauma on the bones? Is there evidence of pathology on the bones (e.g. syphilis, tuberculosis, tumours)?
- Can stable isotope analysis address any questions regarding diet, country of origin and nutrition?
- Can DNA testing address any questions not answerable by the skeletal remains themselves, such as sex, familial relationships (if buried with another individual/s) or

race?

- Is there potential for DNA to be tested against any individuals who may come forward as a descendant of the deceased?

4.2. Process for DNA testing, isotope analysis and environmental sampling

Pre-excavation

The Excavation Director, in consultation with the Forensic Anthropologist, will nominate a suitable laboratory prior to works commencing. Requirements for DNA testing, isotope analysis and environmental sampling will be identified in the archaeological research design and archaeological method statement.

Excavation

In order to prevent cross-contamination, the following sample collection and excavation process should be followed:

- The location, quantity and material (bone, teeth, hair, soil, wood) of samples will be determined by the Excavation Director or Forensic Anthropologist prior to its collection.
- Samples would be stored in a safe, secure and climate controlled location while excavations are in progress. This would be chosen by the Excavation Director or Forensic Anthropologist on site.
- Each collected sample would be given a unique catalogue number and a sample register would be recorded throughout the excavation;
- 'Clean excavation' procedures would be followed during the excavation of burials and during the sample collection process⁷. This would include:
 - Latex gloves would be worn by individuals excavating and/or handling bone or soil samples. Gloves would be changed for each bone and/or individual to prevent cross-contamination;
 - Excavation tools/brushes would be cleaned prior to and after the collection of each sample to prevent cross-contamination;
 - In some cases, a face mask would be worn when samples for DNA analysis are being collected;
 - Bone samples for DNA testing would be collected with surrounding in situ soil and should not be cleaned prior to bagging;
 - It may be necessary for individuals involved in sample collection to submit DNA for comparison in the event of cross-contamination; and
 - All bags containing samples for analysis would be bagged and labelled appropriately to prevent cross contamination and ensure they are handled and stored correctly.

Post-Excavation

⁷ Guidelines for 'clean excavation' are based on procedures outlined in: Yang, D. Y. & Watt, K. 2005. Contamination controls when preparing archaeological remains for ancient DNA analysis. *Journal of Archaeological Science*, vol. 32, pp. 331–336 and *Society for Historical Archaeology*, 2015-2017. Research and Analysis of Artefacts. Accessed online at: <https://sha.org/conservation-facts/faq/analysis/#C> on 25/5/2017.

On completion of excavations, samples will be transported to nominated laboratories for analysis. A record of their location will be kept.

4.3. Reporting

The results of the investigation of human remains and the exhumation will be included in the archaeological reporting for the project in accordance with the project ARD.

Once finalised, and where it is appropriate to do so as determined in consultation with RAPs and/or as may be required by the relevant Planning Approval obligations, archaeological and associated specialist reports should be submitted to:

- The relevant local Council and Library;
- Heritage NSW Library;
- The State Library of NSW; and
- Made available online for public access and educational purposes.

Further, if significant remains are identified during excavations, the results and findings would be published in academic journals and conference papers where feasible.

4.4. Public involvement

Archaeological excavations may uncover remains directly associated with early settlement and burial practices. Such remains are likely to generate public interest.

Public involvement may include:

- Media releases;
- Public Open Days;
- Preparation of brochures detailing the archaeological excavations;
- Interpretive signage and online blog posts or site diaries while excavations are taking place; and
- The preparation of a Heritage Interpretation Plan designed to provide interpretation of the site within the new development upon the completion of works.

Due to sensitive nature of human skeletal remains, these recommendations would be adapted and modified as appropriate under the direction of Sydney Metro and the Excavation Director.

Such recommendations would also be considered and require approval from relevant stakeholder groups such as known or potential descendants of the deceased, Heritage NSW/Heritage Council of NSW, local Council and interest groups.

4.5. Temporary storage and permanent repository or resting place for remains

Temporary storage

Upon the completion of archaeological excavations, skeletal remains should be boxed separately and temporarily stored within a safe, secure controlled environment to allow for further analysis of the remains. This location would be chosen by the Excavation Director and the Forensic Anthropologist and comply with NSW legislative requirements.

Permanent repository or resting place for remains

A permanent repository or resting place for remains is dependent on the nature and volume of skeletal remains. Final arrangements would be dictated by Sydney Metro, the Excavation Director, Forensic Anthropologist, identified descendants of the deceased, RAPs (if applicable) and/or other stakeholders upon the completion of excavations and subsequent analysis.

5. Definitions

All terminology in this document is taken to mean the generally accepted or dictionary definition. Other terms and jargon specific to this document are defined within the [SM-17-0000203 Sydney Metro glossary](#). Acronyms specific to this document are listed below.

	Definitions
IMS	Integrated Management System (IMS)
TfNSW	Transport for New South Wales
RAP	Registered Aboriginal party
ACHAR	Aboriginal cultural heritage assessment report
ARD	Archaeological research design
AMS	Archaeological method statement
OEH	Office of Environment and Heritage (now Heritage NSW)
PHU	Public Health Unit
ExMP	Exhumation Management Procedure (this Procedure)
ER	Environmental Representative (independent)

6. Accountabilities

The Director Environment, Sustainability and Planning is accountable for this document including approving the document, monitoring its effectiveness and performing a formal document review.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document.

7. Related documents and references

Related documents and references

- SM-18-00105232 Sydney Metro Unexpected Heritage Finds Procedure
- Department of Environment, Climate Change and Water 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010
- Department of Environment, Climate Change and Water 2010, Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW

8. Superseded documents

Superseded documents

Exhumation Management Plan Version 1.1
 Exhumation Management Plan Version 2.0
 Exhumation Management Plan Version 2.1
 Exhumation Management Plan Version 2.2
 Exhumation Management Plan Version 3.0
 Exhumation Management Plan Version 4.0

9. Document history

Version	Date of approval	Notes
1.1	May 2017	New IMS document.
2.0	July 2017	Incorporates Stage 2 (section 3)
2.1	February 2019	Extended for Metro Program wide application, includes changes specific Central Station management, and incorporates comments received from the State Coroner’s Office, NSW Police, NSW Health, and Sydney Metro Environmental, Environmental Representatives engaged on the Central site and the Office of Environment and Heritage (OEH).
2.2	February 2019	Incorporates comments received from Artefact Heritage and Dr Denise Donlon issued to Health and OEH Heritage Division for consultation.
3.0	May 2019	Incorporates Health, Coroner and OEH comments.
4.0	April 2020	Updates to remove specific references to City and South West and Central Station. Change of title to “Procedure”. Update to references.
5.0	March 2021	Minor edits.
5.1	April 2021	Updates to related documents and references.

Appendix 1

NSW Health Policy Directive for Exhumation of Human Remains

CONDITIONS OF APPROVAL FOR EXHUMATION FROM GRAVE

1. The exhumation is to be carried out in the presence of a Public Health Unit's authorised officer or other authorised officer of the NSW Ministry of Health or Local Council authorised Officer and person appointed by Cemetery Authority.
2. At least 48 hours notice of the exhumation arrangements shall be given to the Public Health Unit.
3. Day and time of the exhumation shall be arranged by the participating parties and agreed to by the Public Health Unit.
4. The approval granted is valid for a period of three months and shall lapse on ___/___/____, unless a further approval is granted.
5. The presence of any relative of the deceased at the exhumation is strictly prohibited.
6. No animals are to be permitted within the exhumation site.
7. The cemetery authority and funeral director shall be responsible for the work health and safety of all persons involved in the exhumation and shall ensure that all NSW WorkCover requirements are complied with.
8. If, during the course of the exhumation, it is determined necessary to stop the exhumation by either the exhumation supervisor / cemetery manager or authorised Officer, for any valid reason e.g. work health and / or public health risk, then the exhumation must cease.
9. The remains of the deceased shall be enclosed in a body bag and placed into a new coffin with a name plate attached inscribed with the name of the deceased.
10. The remains of the original coffin are to be placed in the new coffin where possible. Where there is an excess of remains of the original coffin, these remains should be disposed in a sanitary and agreed manner.
11. Excavated soil should be back filled. The soil that was removed from immediately above and around the coffin should be replaced first.
12. If the exhumed remains are to be transferred to another cemetery, a funeral director shall be contracted to transfer the remains from the cemetery grounds or carry out preparatory work for the safe reinterment of the remains.
13. The exhumation will not proceed during or following a period of heavy rainfall within the preceding 24 hours of the appointed time of exhumation. The cemetery manager is to confirm that satisfactory conditions exist for the exhumation to proceed two hours prior to the commencement of the exhumation.
14. Used disposable protective equipment and materials are to be placed in a sealed plastic bag and disposed of in a sanitary manner.

CONDITIONS OF APPROVAL FOR EXHUMATION FROM ABOVE GROUND STRUCTURE

1. The exhumation is to be carried out in presence of a Public Health Unit authorised officer or other authorised officer of the NSW Ministry of Health or Local Council authorised Officer and person appointed by Cemetery Authority.
2. At least 48 hours notice of the exhumation arrangements shall be given to the Public Health Unit.
3. Date and time of the exhumation shall be arranged by the participating parties and agreed to by the Public Health Unit.
4. An approval granted is valid for a period of three months and shall lapse on ___/___/___, unless a further approval is granted.
5. The cemetery authority and funeral director shall be responsible for the work health and safety of all persons involved in the exhumation and shall ensure that all NSW WorkCover requirements are complied with.
6. If, during the course of the exhumation, it is determined necessary to stop the exhumation by either the exhumation supervisor / Cemetery Manager or authorised officer, if for any valid reason e.g. worker health and/or public health risks, then the exhumation must cease.
7. Used disposable protective equipment and materials are to be placed in a sealed plastic bag and disposed in a sanitary manner.



Health

APPLICATION TO EXHUME REMAINS

PUBLIC HEALTH REGULATION, 2012 Clause 70(2)

In accordance with the requirements of Clause 70 (2) of the Public Health Regulation 2012, I
(Full name of applicant)

..... of hereby
(Address)

apply for permission to exhume the remains of the late
(Name of deceased)

from Grave No:....., Section:....., being a single

interment within theCemetery, for the purpose of

I seek permission to exhume for the following reason/s:

The deceased: (cross out which is not applicable)

- was not known to be infected with a prescribed infectious disease as defined in clause 53 of the Public Health Regulation 2012; or
- was known to be infected with a prescribed infectious disease as defined in clause 53 of the Public Health Regulation 2012

I am entitled to make this application, because I am: (tick one)

1. The executor of the estate of the deceased; or
2. The nearest surviving relative of the deceased; or
3. If there is no such executor or relative available to make the application, another the proper person to make the application for the reasons set out below:

.....
(Full reasons for proper person to make application)

Attached is:

1. A certified copy of the death certificate of the deceased.
2. A statutory declaration as to:
 - My relationship to the deceased; and
 - the wishes of the deceased regarding the disposal of the body (if known);
 - the reasons why the Director-General may consider me the proper person in all the circumstances to make the application (if applicable)
3. The application fee of \$.....

The exhumation is to be supervised in strict accordance with the attached Plan of Management

by
employed with(Funeral Director/Cemetery)
in the capacity of

Signature: Date:
(Applicant)



Unclassified



Sydney Metro Unexpected Heritage Finds Procedure

SM-18-001105232

Metro Body of Knowledge (MBoK)

Applicable to:	Sydney Metro
Document Owner:	Senior Heritage Advisor
System Owner:	Director Environment, Sustainability and Planning
Status:	Final
Version:	4.1
Date of issue:	May 2021
Review date:	May 2022 (every year or as required)
© Sydney Metro 2021	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Table of contents

1.	Introduction.....	3
1.1.	Purpose.....	3
1.2.	Scope.....	3
1.3.	Definitions and abbreviations	4
1.3.1.	What is an unexpected heritage find?.....	4
1.3.2.	Abbreviations	4
1.4.	Accountabilities	5
2.	Types of unexpected heritage finds and their statutory protections	5
2.1.	Aboriginal objects.....	6
2.2.	Historic (non-Aboriginal) heritage items.....	6
2.2.1.	Archaeological relics	7
2.2.2.	Other items.....	7
2.3.	Human skeletal remains.....	7
3.	Unexpected heritage finds procedure.....	8
4.	Responsibilities	17
5.	Seeking advice.....	17
6.	Related documents and references.....	18
7.	Superseded documents	18
8.	Document history	18
	Appendix 1: Examples of unexpected heritage finds	19
	Appendix 2: Unexpected Heritage Find Recording Form	25
	Appendix 3: Photographing unexpected heritage items	28
	Context and detailed photographs	28
	Photographing distinguishing features	28
	Photographing bones.....	29
	Appendix 4: Archaeological / heritage advice checklist.....	31
	Appendix 5: Template notification letter.....	32

Figures

Figure 1: Summary of steps to be taken on the discovery of an unexpected heritage item 9

Tables

Table 1: Specific tasks to be implemented following the discovery of an unexpected heritage item .. 10

Table 2: Roles and responsibilities 17

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



1. Introduction

1.1. Purpose

This procedure has been prepared to provide a consistent approach to the management of unexpected Aboriginal and non-Aboriginal heritage uncovered during Sydney Metro activities. It applies to all Sydney Metro activities, both the pre-construction (prior to the Construction Heritage Management Plan approval) and construction phase (post Construction Heritage Management Plan approval) and pre or post-approval activities that are subject to the NSW *Heritage Act (1977)* (Heritage Act) and the *National Parks and Wildlife Act 1974* (NPW Act).

In NSW, there are strict laws to protect and manage both Aboriginal and non-Aboriginal heritage. As a result, appropriate management measures need to be implemented to avoid or minimise impacts, ensure compliance with statutory requirements, 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, Industry and Environment.

Note that a Contractor must not amend the *Sydney Metro Unexpected Finds Procedure* or use a different procedure without the prior approval of Sydney Metro.

This procedure must be read in conjunction with the relevant approval conditions, contract documents and other plans and procedures including the *Sydney Metro Exhumation Management Procedure*, in addition to any other relevant documents as developed by the contractor for the delivery of Sydney Metro activities.

1.2. Scope

This procedure applies to the discovery of any unexpected heritage item, where the find is not anticipated in an approved Archaeological Research Design (ARD) or Archaeological Method Statement (AMS) or other project specific document related to heritage. It applies to all Sydney Metro activities.

This procedure must be followed by all Sydney Metro staff, contractors, subcontractors or any person undertaking work 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 *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW4376 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 State Significant Infrastructure (SSI) /State Significant Development (SSD) planning approval; or

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



- the discovery and disturbance of a heritage item of local significance, where the find is identified and anticipated to occur in an AMS or ARD.

Construction Environment Management Plans (CEMP) should reference or include this procedure. Where there is an approved CEMP, it must be followed in the first instance. Where there is a difference between approved CEMPs and this procedure, the approved CEMP must be followed. Where an approved CEMP does not provide sufficient detail on particular issues, this procedure should be used as a reference.

1.3. Definitions and abbreviations

1.3.1. What is an unexpected heritage find?

An 'unexpected heritage find' can be defined as:

- any unanticipated discovery of an Aboriginal object or archaeological work or relic, which Sydney Metro does not have approval to disturb and/or is not covered under an existing management process or plan
- a find that has not been identified or assessed in a project assessment or document related to heritage
- a find that is not referenced in an archaeological research design (ARD) or archaeological method statement (AMS)
- a find that is not covered by an existing approval under the NPW Act or Heritage Act.

1.3.2. Abbreviations

All terminology in this document is taken to mean the generally accepted or dictionary definition. Other terms and jargon specific to this document are defined within the [SM-17-0000203 Sydney Metro glossary](#). Acronyms specific to this document are listed below.

	Definitions
AHIP	Aboriginal Heritage Impact Permit
Aboriginal object	An Aboriginal object is any deposit, object or material evidence (not being a handcraft 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.
ARD	Archaeological Research Design
AMS	Archaeological Method Statement
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Disturbance	Disturbance is considered to be any physical interference to an item that results in it being destroyed, defaced, damaged, harmed, impacted or altered in any way (this includes archaeological investigation activities).
Excavation Director	A person that has been determined by the Heritage Council of NSW or delegate to meet the Criteria for Assessment of Excavation Directors (4 September 2019 and as updated) and can therefore competently archaeologically investigate a site of either local and/or state significance.
Heritage Act	NSW <i>Heritage Act 1977</i>
NPW Act	NSW <i>National Parks and Wildlife Act 1974</i>
Heritage NSW	Formerly Office of Environment and Heritage (OEH). Now Heritage NSW as part of the Department of Premier and Cabinet NSW.
IMS	Integrated Management System (IMS)
Relic (non-Aboriginal heritage)	A relic means any deposit, artefact, object or material evidence that: <ul style="list-style-type: none"> a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and b) is of State or local significance.
SSD	State Significant Development
SSI	State Significant Infrastructure
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 track, timber sleepers, kerbing, 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.

1.4. Accountabilities

The Director Environment, Sustainability and Planning is accountable for this document including approving the document, monitoring its effectiveness and performing a formal document review.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document.

2. Types of unexpected heritage finds and their statutory protections

Project, field and environmental personnel (including construction contractors) are critical to the early identification and protection of unexpected heritage finds.

Appendix 1 illustrates the wide range of heritage items uncovered to date during Transport for NSW projects and provides an understanding of what unexpected finds may look like.

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Unexpected heritage finds are categorised as either:

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

The relevant legislation that applies to each of these categories is described below.

2.1. Aboriginal objects

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: *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.*

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 Heritage NSW 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).

Examples of Aboriginal objects include stone 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 Heritage NSW. When a person becomes aware of an Aboriginal object they must notify the Director-General of Heritage NSW about its location. Assistance on how to do this is provided in section 4 (Step 5).

2.2. Historic (non-Aboriginal) heritage items

The Heritage Act provides for the care, protection and management of heritage items in NSW. Historic (non-Aboriginal) heritage items include:

- archaeological 'relics' as defined under the Heritage Act; and

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



- other items such as works, buildings or movable objects, which are not considered 'relics' under the Act.

2.2.1. Archaeological relics

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 Heritage NSW under the Act.

A relic is defined as: *'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.'*

A person must notify Heritage NSW, 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.

IMPORTANT!

All relics are subject to statutory controls and protection.

If a relic is likely to be disturbed, an approval is usually required from the Heritage Council of NSW. When a person discovers a relic, they must notify the Heritage Council of NSW of its location.

2.2.2. Other 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, turn tables, timber sleepers, cisterns, fences, sheds, buildings and conduits.

Usually archaeological relics are uncovered via a process of excavation or soil removal. When an unexpected find is uncovered, an archaeological excavation permit under section 140 or section 60 of the Heritage Act may be required to further investigate or remove it if investigation is not covered by an existing approval. In contrast, 'other historic items' either exist above the ground surface (for example a shed), or they are designed to operate and exist beneath the ground surface (for example a culvert). They may also need a permit to alter, disturb or remove them if there is not an approval already in place.

2.3. Human skeletal remains

The *Sydney Metro Exhumation Management Procedure* provides a more detailed explanation of the approval processes related to human skeletal remains.

Human skeletal remains can be classified as:

- reportable deaths
- Aboriginal objects; or

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



- relics

Where it is suspected that less than 100 years has elapsed since death, human skeletal remains come under the jurisdiction of the State Coroner and the *Coroners Act 2009* (NSW). Under s35(2) of the Act, a person must report a 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 old regardless of ancestry. Public health controls may also apply.

Where the remains are suspected of being more than 100 years old, they are considered to be either Aboriginal objects or non-Aboriginal relics, depending on the ancestry of the individual. Aboriginal human remains are protected under the NPW Act, while non-Aboriginal heritage remains are protected under the Heritage Act. The discovery of Aboriginal human remains also triggers notification requirements to the Commonwealth Minister for the Environment under s20 (1) of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

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 appropriately protected and investigated, the relevant authorities notified and approvals received.

3. Unexpected heritage finds procedure

In the event that an unexpected find is encountered on a Sydney Metro project, the steps summarised in Figure 1 and detailed in Table 1 must be followed. There are seven steps in the procedure.

IMPORTANT!

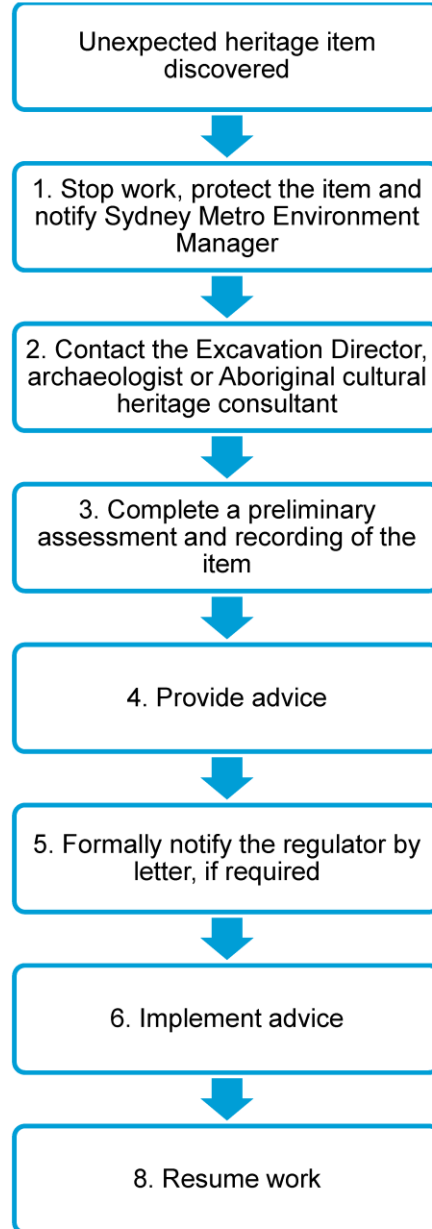
Sydney Metro may have approval to impact certain heritage items during construction. If you think that you may have discovered a heritage item and you are unsure whether an approval is in place or not, **STOP** work and follow this procedure.

Unclassified

Metro Body of Knowledge (MBoK)
(Uncontrolled when printed)



Figure 1: Summary of steps to be taken on the discovery of an unexpected heritage item



Unclassified

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Table 1: Specific tasks to be implemented following the discovery of an unexpected heritage item

Step	Task	Responsibility	Guidance and tools
1	Stop work and protect the item		
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 ground disturbing work is to be undertaken within this zone until further archaeological investigations are completed, and if required, appropriate approvals are obtained. Inform all on-site personnel about the no-go zone.	Contractor's Project Manager or Supervisor	
2	Engage an archaeologist		
2.1	Contact the nominated Excavation Director, archaeologist or Aboriginal cultural heritage consultant to discuss the location and nature of the item and arrange an inspection. The project CEMP should contain the contact details of the archaeologist. Provide as much information as possible to the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, including photographs of the item. Inform the Sydney Metro Environment Manager, and keep them involved in the process. The Environment Manager will inform the Sydney Metro Senior Heritage Advisor.	Contractor's Project Manager	
2.2	Where there is no project Excavation Director, archaeologist or Aboriginal cultural heritage consultant engaged for the work, engage a suitably qualified consultant to assess the find. If the find is likely to be an Aboriginal object, engage a suitably qualified and experienced Aboriginal cultural heritage consultant. If the find is a non-Aboriginal heritage item, engage a suitably qualified and experienced historical archaeological consultant.	Contacto'r's Project Manager	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
3	Preliminary assessment and recording		
3.1	<p>Occasionally, the Excavation Director, archaeologist or Aboriginal cultural heritage consultant may determine from the photographs provided at Step 2.1 that it is not necessary to inspect the item because no heritage constraint exists for the project (for example the item is not an Aboriginal object or archaeological relic).</p> <p>This advice should be provided in writing (for example via email or letter with the consultant's name and company clearly identifiable) to the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	Proceed to Step 7
3.2	Arrange access for the Excavation Director, archaeologist or Aboriginal cultural heritage consultant to inspect the item as soon as practicable. In most cases, a site inspection is required to conduct a preliminary assessment.	Contractor's Project Manager / Excavation Director	
3.3	<p>Subject to the Excavation Director, archaeologist or Aboriginal cultural heritage consultant's assessment, work may recommence at a set distance from the item. This is to protect any other archaeological evidence that may exist in the vicinity, which may have not yet been uncovered.</p> <p>The 'no-go zone' established in Step 1.2 may need to be adjusted to reflect the area of archaeological potential, as determined by the Excavation Director, archaeologist or Aboriginal cultural heritage consultant.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
3.4	<p>Has the item been damaged or harmed?</p> <p>If yes, record the incident in the Incident Management System. Implement any additional reporting requirements related to the planning approval and CEMP where relevant</p>	Contractor's Project Manager / Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
3.5	<p>Can the work avoid further impact to the item?</p> <p>Project Manager to confirm with Sydney Metro Environment Manager.</p>	Contractor's Project Manager	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
3.6	Record the item and complete the Unexpected Heritage Item Recording Form.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	<p>Appendix 2 Unexpected Heritage Item Recording Form</p> <p>Appendix 3 Photographing Unexpected Heritage Items</p>
3.7	<p>Is the item likely to be bone?</p> <p>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 Procedure.</p> <p>If no, proceed to the next step.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
3.8	<p>The Excavation Director, archaeologist or Aboriginal cultural heritage consultant may provide advice after the inspection and preliminary assessment that no heritage constraint exists for the project (for example the item is not an Aboriginal object or relic).</p> <p>This advice should be provided in writing (for example via email or letter with the consultant's name and company clearly identifiable) to the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	Proceed to Step 7
3.9	Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains). The Excavation Director, archaeologist or Aboriginal cultural heritage consultant can provide contacts for such specialist consultants.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
4	Provide advice		
4.1	The Excavation Director, archaeologist or Aboriginal cultural heritage consultant should provide written advice with input from Registered Aboriginal Parties where appropriate. The plan should include as a minimum a) a description of the item, b) an assessment of the significance of the item, c) approval or statutory notification requirements, d) reporting requirements, e) consultation requirements, and f) relevance	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	<p>Appendix 4 Archaeological / heritage advice checklist</p> <p>Other references DECCW 2010, Aboriginal Cultural Heritage Consultation</p>

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
	to other project approvals or management plans.		<p>Requirements for Proponents 2010</p> <p>DECCW 2010, Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</p> <p>Heritage Branch 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'</p>
4.2	<p>In preparing the advice, the Excavation Director, archaeologist or Aboriginal cultural heritage consultant must review the CEMP, heritage sub-plans, conditions of project approval and associated heritage assessment documentation (for example an Environmental Impact Statement Technical Paper).</p> <p>The Excavation Director, archaeologist or Aboriginal cultural heritage consultant must determine if the item is consistent with previous heritage or project approvals or management plans. The Project Manager must provide all relevant documents to the Excavation Director to assist with this.</p>	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
4.3	The Excavation Director, archaeologist or Aboriginal cultural heritage consultant must submit this advice as a report, letter or email to the Project Manager as soon as practicable.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant	
4.4	The Project Manager, Sydney Metro Environment Manager and Sydney Metro Senior Heritage Advisor should review the advice to ensure that all requirements are addressed and can be reasonably implemented.	Consultant's Project Manager / Sydney Metro Environment Manager / Sydney Metro Senior Heritage Advisor	
5	Notify the regulator, if required		
5.1	<p>Based on the advice and any statutory requirements, is notification to Heritage NSW and the Secretary required?</p> <p>If no, proceed directly to Step 6.</p> <p>If yes, proceed to next step.</p>	Sydney Metro Environment Manager / Sydney Metro Senior Heritage Advisor	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
5.2	If notification is required, complete the template notification letter and forward with supporting documentation (including advice obtained at Step 4) to the Sydney Metro Environment Manager. The Environment Manager will seek the approval of the Sydney Metro Senior Heritage Advisor and the signature of the Director Project Environment, Sustainability & Planning or Director Environment, Sustainability & Planning	Sydney Metro Environment Manager	Appendix 5 Template Notification Letter
5.3	Forward the signed notification letter to Heritage NSW once approved and cc Sydney Metro. Informal notification (via a phone call or email) to Heritage NSW prior to sending the letter is appropriate. The advice and completed Unexpected Heritage Item Recording Form (Appendix 2) must be submitted with the notification letter (for both Aboriginal objects and non-Aboriginal relics). If the item is an archaeological relic as defined under the Act, a section 146 notification form must also be completed and sent to Heritage NSW as part of the notification.	Sydney Metro Environment Manager	Appendix 2 Unexpected Heritage Item Recording Form Appendix 5 Template Notification Letter
5.4	A copy of the final signed notification letter, archaeological or heritage management plan and the Unexpected Heritage Item Recording Form is to be kept on file and a copy sent to the Sydney Metro Project Manager	Sydney Metro Environment Manager / Contractor's Project Manager	
6	Implement advice		
6.1	The advice should be modified to take into account any additional advice resulting from notification and discussions with the regulator if required.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.2	Implement advice. Where impact cannot be avoided, this could include a formal assessment of heritage significance and impact assessment, preparation of excavation or recording methodologies, consultation with Registered Aboriginal Parties and obtaining heritage approvals if required.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	DECCW 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 DECCW 2010, Code of Practice for the Archaeological Investigation of

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
			Aboriginal Objects in NSW
6.3	Where heritage approvals are required, contact the Sydney Metro Environment Manager for further advice and support. Please note there are time constraints associated with heritage approval preparation and processing.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.4	For SSI or SSD projects, or projects approved under Part 5 of the EP&A Act, assess whether the heritage impact is consistent with the project approval or if project approval modification is required from the Department of Planning, Industry and Environment or the relevant consent authority.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.5	Where statutory approvals (or project modifications) are required, impact upon Aboriginal objects or relics must not occur until heritage and planning approvals have been issued by the appropriate regulator.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.6	Where statutory approval is not required but where recording is recommended by the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, sufficient time and resources must be allowed for this to occur.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
6.7	Ensure short term and permanent storage locations are identified for archaeological material or other heritage material recovered from site, where required. Interested third parties (for example local Aboriginal land councils, local councils or museums) should be consulted on this issue. Contact the Excavation Director, archaeologist or Aboriginal cultural heritage consultant for advice on this issue.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
7	Resume work		
7.1	Seek written clearance to resume project work from the Excavation Director, archaeologist or Aboriginal cultural heritage consultant. Clearance would only be given once all archaeological excavation or heritage recommendations and approvals (where required) are complete. Resumption of	Contractor's Project Manager	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Step	Task	Responsibility	Guidance and tools
	project work must be in accordance with all the relevant project and heritage approvals / determinations.		
7.2	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.	Excavation Director, archaeologist or Aboriginal cultural heritage consultant / Contractor's Project Manager	
7.3	If additional unexpected heritage items are discovered, this procedure must begin again from Step 1.	All	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



4. Responsibilities

Table 2: Roles and responsibilities

Role	Responsibility
Contractor / Supervisor	<p>Stop work immediately when an unexpected heritage item is encountered. Cordon off area until Contractor Environmental Manager / Excavation Director, archaeologist or Aboriginal cultural heritage consultant advises that work can recommence.</p> <p>Manage the process of the identification, protection and mitigation of impacts on the heritage item.</p> <p>Liaise with the Sydney Metro Project Manager, Environment Manager and Senior Heritage Advisor.</p> <p>Assist the Excavation Director, archaeologist or Aboriginal cultural heritage consultant with mitigation and statutory requirements.</p> <p>Complete Incident Report and review CEMP for any changes that may be required. Proposed amendments to the CEMP if any changes are required.</p>
Contractor's Project Manager	<p>Ensure all aspects of this procedure are implemented. Advise the Contractor / Supervisor to recommence work if all applicable requirements have been satisfied and the Contractor Environmental Manager/ Excavation Director, archaeologist or aboriginal cultural heritage consultant has approved recommencement of work.</p>
Contractor's Excavation Director / archaeologist or Aboriginal cultural heritage consultant	<p>Provide expert advice to the Contractor and Sydney Metro Environment Manager on find identification, significance, mitigation, legislative procedures and requirements.</p>
Environmental Representative	<p>Ensure compliance with relevant approvals (new and existing) and the Construction Environment Management Plan.</p>
Sydney Metro Environment Manager	<p>Notify the Director Project Environment, Sustainability & Planning of find and help support Contractor with managing Incident Reporting.</p>
Sydney Metro Senior Heritage Advisor	<p>Provide expert advice to Sydney Metro Environment Manager and project as required.</p>

5. Seeking advice

Advice on this procedure should be sought from the Sydney Metro Environment Manager in the first instance. Contractors and delivery 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.

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



6. Related documents and references

Related documents and references

- SM ES-PW-315/5.0 Sydney Metro Exhumation Management Procedure
- SM-17-00000096 Sydney Metro Environmental Incident Classification and Reporting
- 3TP-SD-015/7.0 Transport for NSW Guide to Environmental Control Map
- Roads and Maritime Services, November 2015, Unexpected Heritage Items Heritage Procedure 02
- [SM-17-00000203 Sydney Metro glossary](#)
- Department of Environment, Climate Change and Water 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010
- Department of Environment, Climate Change and Water 2010, Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW
- Heritage Branch Department of Planning 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'

7. Superseded documents

Superseded documents

Sydney Metro Unexpected Heritage Finds Procedure v3.3

8. Document history

Version	Date of approval	Notes
1.1	June 2017	Incorporates Environmental Representative comments
1.2		Amends p13 step 8 reference to s146
1.3		Incorporates Planning Mods 1-4 including amended CoA E20
1.4	March 2018	Incorporates Environmental Representative comments
2.0		Removes SSI 15-7400 COA reference
3.0		Revises definitions
3.1		Revises procedure
3.2		Revises roles and responsibilities
3.3		Minor edits and corrections
4.0	April 2021	Revises definitions and procedure; references the Sydney Metro Exhumation Management Procedure v5 with amendments throughout for consistency with that document.
4.1	April 2021	Updates to related documents and references.

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Appendix 1: Examples of unexpected heritage finds



Plate 1: Aboriginal stone artefacts found at the Wickham Transport Interchange, 2015



Plate 2: Aboriginal artefacts (shell material) found at the Wickham Transport Interchange, 2015

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



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



Plate 4: Sandstone pavers uncovered at Balmain East, 2016

© Sydney Metro 2021

Unclassified

Page 20 of 32

SM-18-001105232

Unexpected Heritage Finds Procedure Final

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Plate 5: Platform at Hamilton Station classified as a 'work' by the project archaeologist, Wickham Transport Interchange project, 2015



Plate 6: Sandstone flagging and cesspit, Wynyard Walk project, 2014

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Plate 7: Chinese Ming Dynasty pottery and English porcelain / pottery dating back to the early nineteenth century, Wynyard Walk project, 2014



Plate 8: Pottery made by convict potter Thomas Ball during the early settlement, Wynyard Walk project, 2014

© Sydney Metro 2021

Unclassified

Page 22 of 32

SM-18-001105232

Unexpected Heritage Finds Procedure Final

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



The following images, obtained from the Roads and Maritime Services Unexpected Heritage Items Heritage Procedure 02.



Plate 9: 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)

© Sydney Metro 2021

Unclassified

Page 23 of 32

SM-18-001105232

Unexpected Heritage Finds Procedure Final

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)

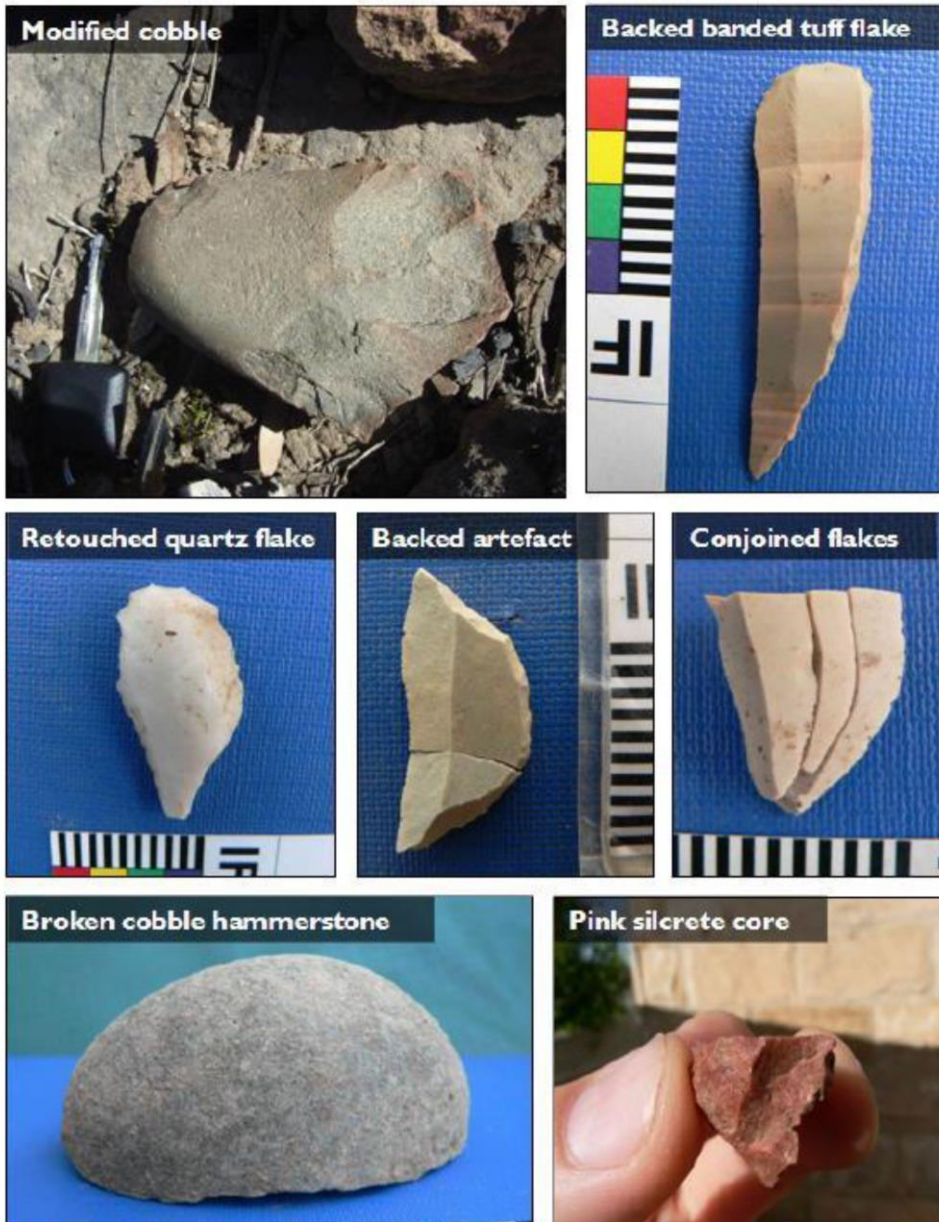


Plate 10: Culturally modified stone discovered on Main Road 92, about two kilometres west of Sassafras. The remaining images shown a selection of stone artefacts retrieved from test and salvage archaeological excavations during the Hume Highway Duplication and Bypass projects from 2006-2010.

© Sydney Metro 2021

SM-18-001105232

Unclassified

Page 24 of 32

Unexpected Heritage Finds Procedure Final

Unclassified

Metro Body of Knowledge (MBoK)
(Uncontrolled when printed)



Appendix 2: Unexpected Heritage Find Recording Form

This form is to be completed by the Excavation Director on the discovery of an archaeological heritage find 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 <i>(What type of item is it likely to be? Tick the relevant boxes).</i>			
A. A relic	<input type="checkbox"/>	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'	<input type="checkbox"/>	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	<input type="checkbox"/>	An 'Aboriginal object' may include stone tools, stone flakes, shell middens, rock art, scarred trees and human bones	
D. Bone	<input type="checkbox"/>	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	<input type="checkbox"/>		
Provide a short description of the item <i>(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).</i>			

Unclassified

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



<p>Sketch <i>(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)</i></p>			
<p>Action taken (Tick either A or B)</p>			
<p>A. Unexpected item would not be further impacted on by the works</p>	<input type="checkbox"/>	<p>Describe how works would avoid impact on the item. (E.g. the rail tracks would be left in situ and recovered with paving).</p>	
<p>B. Unexpected item would be further impacted by the works</p>	<input type="checkbox"/>	<p>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.)</p>	
Excavation Director, archaeologist or Aboriginal cultural heritage consultant			
		Name	
		Signature	

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



IMPORTANT

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

Unclassified

Metro Body of Knowledge (MBoK)
(Uncontrolled when printed)



Appendix 3: Photographing unexpected heritage items

Photographs of unexpected finds 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.

Photographing distinguishing features



Figure 2: Close up detail of the sandstone surface showing material type, formation and construction detail. This is essential for establishing date of the feature.

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.

Unclassified

Unclassified

Metro Body of Knowledge (MBoK)
(Uncontrolled when printed)



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 be 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 5 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

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



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.

Unclassified

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Appendix 4: Archaeological / heritage advice checklist

The archaeologist/Aboriginal heritage consultant must provide advice to the Sydney Metro Environment Manager and Senior Advisor Heritage as soon as possible after an inspection of the site has been completed. This advice 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, section 60, exemptions etc.	Yes/No	
• Regulator Aboriginal objects / relics notification	Yes/No	
• Notification to the appropriate agency for s170 heritage conservation register	Yes/No	
• Compliance with CEMP or other project heritage approvals	Yes/No	
Stakeholder consultation		
• Consultation with Registered Aboriginal Parties	Yes/No	
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	

Unclassified

Appendix 5: Template notification letter

Note: Notification of the discovery of a relic is required under section 146 of the Heritage Act 1977. The notification should be submitted through the Heritage Management System (HMS).

Insert on Sydney Metro letterhead

[Name]
Heritage NSW
[Address]

[Select and type salutation and name],

Re: Unexpected heritage item discovered during Sydney Metro activities

I write to inform you of an unexpected [select: Aboriginal object / relic] found during Sydney Metro activities at [insert location] on [insert date] in accordance with the notification requirement under select: [NPW Act, 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). 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 Heritage NSW 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 [add contact number].

Yours sincerely

[Name]

Sydney Metro Director, Environment, Sustainability & Planning

[Attach the advice from the Excavation Director, archaeologist or Aboriginal cultural heritage consultant, completed recording form and section 146 notification]

Unclassified

C. STAKEHOLDER RESPONSES

AGENCY	DATE DOCUMENTS SENT FOR REVIEW	DATE RECEIVED COMMENTS	COMMENTS	DOCUMENT REFERENCE	HOW COMMENT HAS BEEN ADDRESSED
Cumberland City Council	14/09/2021	14/09/2021	I have reviewed the Heritage report and there are no further comments to be provided. Delta will include noise and vibration monitoring consistent with our feedback on the Draft SEARs and the Minister's approval.	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	No comments
City of Parramatta	27/08/2021		Comment from City of Parramatta City Planning Team: Parramatta station area It is noted that heritage items within the Parramatta metro station construction site are proposed to be retained and protected including the Victorian Regency terraced shops at 41 – 45 George Street, Kia Ora Georgian house at 64 Macquarie Street and the Convict Drain. Items adjoining the site include the Roxy Theatre at 67 – 69 George Street and the Horse Parapet Facade on the corner of Macquarie Streets and Church Streets. The management plan appears to identify appropriate measures to protect these items during demolition of surrounding buildings. Measures include particularly the erection of scaffolding with shade cloth around heritage buildings and also relate to vibration control and monitoring. However, it should be ensured	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p>Aboriginal and non-Aboriginal archaeology at Parramatta site added. Potential Aboriginal archaeological deposit at Clyde added. Refer to Section 5.1</p> <p>Appendix E added Clyde Site Identifying RTA Depot</p> <p>Recommended site survey and demolition plans be prepared. Refer NAH2 in section 5.3.</p>

			<p>that the extent of protection of the identified heritage items is not less than the area identified in the heritage maps for the items in Parramatta LEP 2011 and or in the State Heritage Register if relevant. There is concern that the Heritage Management Plan does not identify the significant Aboriginal and European archaeology of the site. Whist assurances have been provided that this contract does not involve any significant excavation that could affect the archaeological resources the significant archaeology should be usefully referenced in the Heritage Management Plan. Clyde construction site It is noted that Figure 9 Clyde Site Heritage Items map of the main Delta Group Site Establishment Management Plan correctly identifies the heritage items within the construction area being the RTA Depot on Unwin Street and wetlands. This map is not included in the Heritage Management Plan. Adjoining the property on Shirley Street is the heritage listed Capral Aluminium Building. The wetlands listing should be referenced in the Heritage Management plan and measures provided for its protection, including no removal of vegetation. It should be ensured that the extent of the area of the RTA depot protected during demolition of buildings at the Clyde construction site is not less than the area shown on the heritage map and included with the Parramatta LEP 2011.</p>		
--	--	--	--	--	--

Heritage NSW	27/08/2021	23/09/2021	<p><u>Convict Drain</u>: It is unclear whether the exact position of the Convict Drain has been established as specified in MCoA D15 and D26. Furthermore, the document states:</p> <ul style="list-style-type: none"> ○ <i>The Parramatta metro station construction site marginally encroaches on a portion of the curtilage of the convict drain heritage item, located beneath Macquarie Lane. Demolition of modern buildings on the site would not result in any substantial adverse heritage impact and would not result in the item’s heritage listing eligibility being reduced.</i> <p><i>Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan.</i></p> <ul style="list-style-type: none"> ○ This statement does not specify whether the drain will be damaged (or not), but only talks about “any substantial adverse heritage impact”. It is unclear how heavy machinery can be used in the demolition of modern buildings would not impact the drain <u>if</u> it is in the proposed works area. Further definitive statements are required about its precise location, the exact works being undertaken in those areas, the extent of likely damage (if any) and mitigation measures as outlined in MCoA D15. If the information is available at this stage of the project, the HMP should identify the point in the project it will be undertaken, when and how the HMP will be revised to address it. 	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p>Convict Drain</p> <p>Section 5.4.5 has been amended to identify and illustrate the location of the convict drain based on archaeological survey data. Figure 10 illustrates the location of the drain and identifies the associated works. Text including ‘any substantial adverse heritage impact’ has been amended to confirm demolition works would not result in heritage impact and provide measures to be undertaken by Delta to ensure this, including demolition to slab only and establishing a heavy plant exclusion zone during demolition works. Additional information on the process for archaeological investigations in response to D26 and requirements of D15 have been included. Impacts to the convict drain will not occur unless approved under D15 and direction from Sydney Metro is provided. Archaeological and archival recording methods, should impacts be approved, are referenced and provided in the approved ARDEM 2021.</p> <p>Measures for working over the Convict drain with heavy equipment</p> <p>Demolition will be undertaken to the lowest slab on ground. With all slabs remaining in place for the duration of demolition works. These concrete slabs are present at 74 Macquarie Street where the Convict drain is predicted to run below.</p>
--------------	------------	------------	---	---	--

					<p>An exclusion zone will be established in Macquarie Lane for heavy plant in the small portion where the Convict drain runs only 400mm below the existing surface levels.</p> <p>The largest machine operating in this location will be a 47 tonne excavator. Due to the large area of its tracks it has ground bearing pressure of 88kPa. This pressure is significantly lower than that of an ordinary passenger car on each of its four wheels.</p>
Heritage NSW	27/08/2021	23/09/2021	<p>Roxy Theatre: The vibration damage from any works near the Roxy Theatre have been identified as being of above cosmetic level criteria</p> <p>The heritage item is predicted to experience vibration levels above the cosmetic damage screening criteria. It will be retained and protected by Delta during the demolition stage of the Project. Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan.</p> <p>It is unclear how this statement will respond to MCoA D17, which states:</p> <p>The Roxy Theatre, White Bay Power Station, the former State Abattoirs and the former RTA Depot facade fronting Unwin Street, must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in Condition A1 of this schedule.</p> <p>Furthermore, the under Vibration Screening Criteria, the document states:</p> <p>Exceedance of the cosmetic damage level will not require demolition to cease, but alerts the Site Manager to proceed with caution at reduced force or load, or reduce the number of vibration-generating plant/equipment items operating simultaneously. An exceedance will also require the Project Manager to implement alternative techniques pending further</p>	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p>Roxy Theatre</p> <p>Section 5.4.4 has been amended with further mitigating measures (as below) to ensure The Roxy is not adversely affected.</p> <p>Construction Noise and Vibration</p> <p>The Roxy Theatre heritage item is located immediately adjacent to the construction site at 67-69 George St, Parramatta. The Construction Noise and Vibration Management Plan predicts that the works have potential to expose this heritage item to vibration levels above the cosmetic damage screening criteria. To mitigate the risk of damage caused by exceedance of vibration levels, Delta will undertake the following mitigation measures:</p> <ul style="list-style-type: none"> A more detailed assessment of the structure (in consultation with a structural engineer) and vibration monitoring will be carried out to ensure vibration levels remain below

			<p>analysis of the vibration frequency content in order to determine any potential exceedance of the criteria presented in the NVMSP.</p> <p>HNSW notes that the management of heritage items under Condition D17 may require specific advice in the HMP and this is recommended for clarity. The document should address requirements to repair potential damage according to Condition C13(d) to this item and others referenced by the condition. It is currently silent on the requirements and how they will be addressed by the project in future. The document should be revised to address these aspects of the project.</p> <p>As scaffolding and hoarding will be placed around the Roxy Theatre to protect the building from any inadvertent damage associated building demolition in the adjacent site, there is a danger that this may lead to illegal opportunities to enter the Roxy building (and hence may be subject to vandalism). The scaffolding surrounding this building should either be constructed to prevent access to the building or only accessible to authorised persons. Advice on the regularity of inspections should be addressed in this document.</p>		<p>appropriate limits for that structure. This will be reviewed with input from the Built Heritage Expert and Historic Structures Engineer in accordance with the recommendations for NAH2.</p> <ul style="list-style-type: none"> • A more detailed assessment would specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed. • It will be retained and protected by Delta during the demolition stage of the Project. • Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan and confirmed in consultation with the Built Heritage Expert and Historic Structures Engineer.’ <p>Scaffolding and Hoarding—Security of The Roxy</p> <p>The carpark will be scaffolded and hoarded during its demolition to prevent rubble falling on The Roxy. The scaffold will be set back 700mm from The Roxy. It will have a secure skin of chainmesh wire and shade cloth from top of scaffold to the ground fixed to the outside face of the scaffold to eliminate toeholds. This skin will not be climbable and will not provide an opportunity for access into or onto The Roxy.</p>
--	--	--	--	--	---

					<p>The hoarding will be installed to a height of 2.4m to a project security standard that constructs the hoarding to prevent any opportunity for climbing points.</p> <p>These measures, together with signage and authorised access limited to construction workers within site will prevent access to the Roxy Theatre Building.</p> <p>Perimeter inspections of hoarding will be undertaken daily as part of daily inspection items. Scaffold will be inspected and certified on a monthly basis.</p>
Heritage NSW	27/08/2021	23/09/2021	<p><u>Victorian Regency terraced shops</u>: The document states that the Victorian Regency terraced shops at 41-45 George Street will: <i>be retained and protected by Delta during the demolition stage of the Project. The heritage curtilage includes adjoining modern buildings that are not considered to have heritage significance, that will be removed as part of the demolition works.</i></p> <p>Further clarification is required as to what buildings the applicant proposes to demolish and the process undertaken to assess their significance.</p>	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p><u>Victorian Regency terraced shops</u></p> <p>The relative significance of the Victorian Regency terraced shops at 43-47 George Street when compared to the structures on the whole site at 41-53 George Street was identified in the EIS. These shops will be protected and retained and are identified by their sandstone facades and slate roofs. The HMSP provides for the survey of the site and the identification of heritage items to be retained on that survey. It also provides for protection during demolition and works as below:</p> <p>“Site Survey and Demolition Plans</p> <p>Provide surveys of the site areas identifying:</p> <ol style="list-style-type: none"> the listed curtilages (boundaries) of heritage items on site and adjacent to the site the buildings, trees, vegetation and other features of the

					<p>site overlaid with the heritage significance of these elements</p> <p>3. the predicted locations of sub-surface structures or potential archaeological deposits</p> <p>4. extent of demolition proposed including buffer zones.</p> <p>Protection during demolition and works</p> <p>Identify specific protection methods for barriers and/or temporary supports to structures to prevent damage to retained heritage elements.</p> <p>Identify specific methodologies for detachment of fabric to be demolished where connected to heritage fabric not approved for demolition.”</p>
Heritage NSW	27/08/2021	23/09/2021	<p><u>Curation, display and public access of artefacts:</u> NAH8 states that: <i>Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities.</i></p> <p>These elements are not addressed in the document. They may require amendment in future to address these parts of the condition based on the final extent of the archaeological collection. However, some advice on how it will be addressed in future– even timing for being addressed, should be included in the document now.</p>	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p><u>Curation, display and public access of artefacts</u></p> <p>The process for curation, display and public access of artefacts is provided in the approved ARDEM 2021. A Sydney Metro West Heritage Interpretation Strategy will be prepared by Sydney Metro (currently not available).</p> <p>Sections 5.3.1 (Parramatta archaeological investigations) and 5.3.2 (Clyde archaeological investigations) have been updated with the temporary and long-term storage process, cross references to the ARDEM 2021 and AHR 2021, and Interpretation Strategy (yet to be prepared). The process for Aboriginal objects will also include consultation with the RAPs.</p>

			<p><u>Wrong Authority Agency:</u> The wrong heritage authority agency has been specified under the section <i>Unexpected Finds Procedure</i>. The document should replace the term <i>Heritage Division</i> with <i>Heritage NSW, Department of Premier and Cabinet</i> in the areas discussing <i>Notification and Consultation</i>, and <i>Closeout and Reporting</i>.</p> <p>Similarly, the Executive Director (not the <i>Director General</i> as stated in the <i>Environmental Reporting</i> section) of Heritage NSW should be advised in the event of an environmental incident, and this should reported through the official established channels (in writing) and not verbally as stated.</p>	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p>Wrong authority agency References to the agency and Executive Director have been removed/updated.</p>
Heritage NSW	27/08/2021	23/09/2021	<p><u>Unexpected Finds Procedure:</u> Does not refer to the need to notify the Heritage Council of NSW under s146 of the <i>Heritage Act 1977</i>. This needs to be included to address legislative requirements. Lodgment of a s146 notification should be conducted by the new Heritage Management System (HMS) upon the discovery of relics of local or state significance.</p>	SMWSDDS-DLT-1NL-HE-PLN-000037 Heritage Management Plan (revision 0)	<p>Unexpected finds procedure Section 5.7.1 Unexpected Heritage Finds: has been updated to included S146 notification requirements for archaeological relics as defined by the Heritage Act. Section 5.7.2 Notifiable Events: has been updated to include notification under Section 146 of the Heritage Act for relics.</p>



27 August 2021

Attn: [REDACTED]
Cumberland City Council
PO Box 42
MERRYLANDS NSW 2160

Dear [REDACTED]

**Sydney Metro West Stage 1
Parramatta and Clyde Early Works Stakeholder Consultation**

Sydney Metro West is a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, with a target travel time of about 20 minutes between the two centres.

The Department of Planning, Industry and Environment assessed the first Sydney Metro West Environmental Impact Statement and granted approval for the Sydney Metro West Project Concept from Westmead to the Sydney CBD and station excavation and tunnelling between Westmead and The Bays on 11 March, 2021.

To enable construction of the Parramatta metro station and the Stabling and Maintenance Facility at Clyde, early demolition of existing buildings need to be undertaken on these sites before the tunnelling contractor begins their work.

Sydney Metro awarded the contract for the Parramatta and Clyde Early Works to Delta Group. These works are due to commence in October 2021 and completion of the work is expected to occur in October 2022.

As part of the preparation for construction and as required by the relevant planning approval, and in view of timeframes for delivery of the Sydney Metro West, Delta Group are seeking early input and feedback on the Construction Environmental Management Plan (CEMP) and its sub plans.

To achieve timely approvals, we would welcome your feedback on the attached plans by 14 September 2021. Sydney Metro will hold a Stakeholders Workshop on 8 September 2021 where comments on the CEMP and sub plans will be discussed. An invitation to this workshop will be sent to you shortly.

Please contact [REDACTED] (Environment Manager) on [REDACTED] should you have any questions.

Yours sincerely

[REDACTED]
[REDACTED]

Director, Project Environment, Sustainability and Planning, Metro West

Sydney Metro

Level 43, 680 George Street, Sydney NSW 2000 | PO Box K659, Haymarket NSW 1240
T 02 8265 9400 | sydneymetro.info | ABN 12 354 063 515

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 14 September 2021 12:14 PM
To: [REDACTED]
Subject: HERITAGE and Noise and Vibration comments from Cumberland Council

Hello [REDACTED]
See below from Cumberland Council
Regards
[REDACTED]

FYI below.

I just need to follow up on the engineering comments now 😊

Thanks
[REDACTED]



[REDACTED]
EXECUTIVE ASSISTANT TO DIRECTOR ENVIRONMENT & PLANNING

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160
T [REDACTED]
E [REDACTED]
W www.cumberland.nsw.gov.au

From: [REDACTED]
Sent: Tuesday, 14 September 2021 10:50 AM
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
Subject: RE: Metro West Demolition Workshop Plans and Agenda for Thursday 9 September

Hi [REDACTED]

I have reviewed the Heritage report and there are no further comments to be provided. Delta will include noise and vibration monitoring consistent with our feed back on the Draft SEARs and the Minister's approval.

Thanks,
[REDACTED]



[Redacted]

COORDINATOR INFRASTRUCTURE AND PLACE STRATEGY AND PLANNING

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160

T [Redacted]

E [Redacted]

W www.cumberland.nsw.gov.au

From: [Redacted]

Sent: Tuesday, 7 September 2021 8:19 AM

To: [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

Subject: FW: Metro West Demolition Workshop Plans and Agenda for Thursday 9 September

Hi All,

Please see attached agenda and four plans which Transport planning approval requires Metro West to seek comments from Council.

Many thanks

[Redacted]



[Redacted]

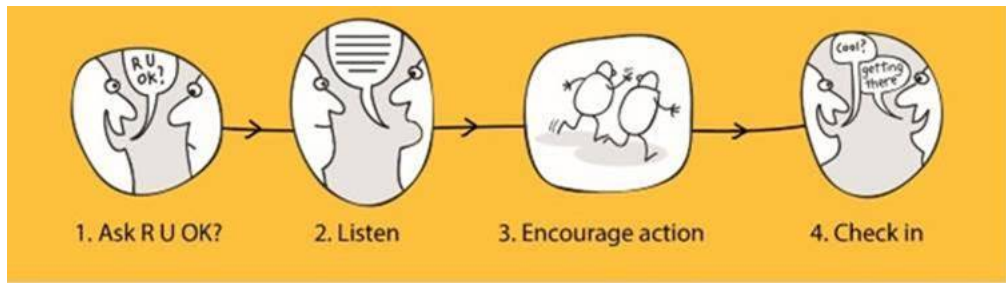
EXECUTIVE ASSISTANT TO DIRECTOR ENVIRONMENT & PLANNING

16 Memorial Avenue, PO Box 42 Merrylands NSW 2160

T [Redacted]

E [Redacted]

W www.cumberland.nsw.gov.au



RUOK?TM
9 September 2021

From: [Redacted]

Sent: Monday, 6 September 2021 5:10 PM

To: [REDACTED]

Subject: Metro West Demolition Workshop Plans and Agenda for Thursday 9 September

Hello [REDACTED]

Please see attached agenda and four plans which our planning approval requires Metro West to seek comments from Council about.

In two further emails I will send additional management plans which are for information only and which Metro West is not required to seek comments about. That said, some may be of interest to Council and we will be happy to discuss in the workshop Thursday.

Regards

[REDACTED]

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 Consider the environment. Please don't print this e-mail unless really necessary.

Disclaimer

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this unintentionally, please contact the sender and delete the material from all computers. Cumberland City Council does not warrant the material contained in this message is free from Computer virus or defect. Loss or damage incurred in use is not the responsibility of Cumberland City Council. Cumberland City Council respects your privacy and is committed to protecting it. To view our Privacy Policy please visit www.cumberland.nsw.gov.au



27 August 2021

Attn: [REDACTED]
City of Parramatta
PO Box 32
PARRAMATTA NSW 2124

Dear [REDACTED]

**Sydney Metro West Stage 1
Parramatta and Clyde Early Works Stakeholder Consultation**

Sydney Metro West is a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, with a target travel time of about 20 minutes between the two centres.

The Department of Planning, Industry and Environment assessed the first Sydney Metro West Environmental Impact Statement and granted approval for the Sydney Metro West Project Concept from Westmead to the Sydney CBD and station excavation and tunnelling between Westmead and The Bays on 11 March, 2021.

To enable construction of the Parramatta metro station and the Stabling and Maintenance Facility at Clyde, early demolition of existing buildings need to be undertaken on these sites before the tunnelling contractor begins their work.

Sydney Metro awarded the contract for the Parramatta and Clyde Early Works to Delta Group. These works are due to commence in October 2021 and completion of the work is expected to occur in October 2022.

As part of the preparation for construction and as required by the relevant planning approval, and in view of timeframes for delivery of the Sydney Metro West, Delta Group are seeking early input and feedback on the Construction Environmental Management Plan (CEMP) and its sub plans.

To achieve timely approvals, we would welcome your feedback on the attached plans by 14 September 2021. Sydney Metro will hold a Stakeholders Workshop on 8 September 2021 where comments on the CEMP and sub plans will be discussed. An invitation to this workshop will be sent to you shortly.

Please contact [REDACTED] (Environment Manager) on [REDACTED] should you have any questions.

Yours sincerely

[REDACTED]

[REDACTED]
Director, Project Environment, Sustainability and Planning, Metro West

Sydney Metro

Level 43, 680 George Street, Sydney NSW 2000 | PO Box K659, Haymarket NSW 1240
T 02 8265 9400 | sydneymetro.info | ABN 12 354 063 515

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 21 September 2021 11:22 AM
To: [REDACTED]
Subject: FW: Metro West Clyde and Parramatta Demolition Management Plan Consultation Package for City of Parramatta for comment by 14 September
Attachments: Copy of SMWSDDS-SMD-TX-004371-SMWSDDS - Feedback on Document Comments or Responses.xlsx

From: [REDACTED]
Sent: Tuesday, 21 September 2021 11:21 AM
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: Metro West Clyde and Parramatta Demolition Management Plan Consultation Package for City of Parramatta for comment by 14 September

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi [REDACTED]

Thank you for considering, below and attached, a few LATE comments from City of Parramatta on demolition management plans for Metro West.

Regarding the Flora and Fauna Management Plan

Please see the comment included on the attached comment spreadsheet filled by our Open Spaces and Natural Resources team.

Regarding the Noise and Vibration Management Plan which includes the Noise and Vibration Monitoring Program

Please note the following comment submitted by our Regulatory Services team:

- We note that section 8.2 indicates that the overall complaints management system for the Metro project will be utilised in this demolition stage which includes a 24/7 community hotline for any complaints that are to be transferrable to a Delta team member (not an answering machine) while construction is occurring. This number should also be made available to Council prior to any works commencing so that we can advise our Customer Service representatives in order that complaints are referred appropriately and in a timely manner.

Regarding the Heritage Management Plan

Please note the following comments made by our City Planning team:

Westmead station area

- It is noted that this area is outside of the Parramatta LGA and falls within Cumberland Council LGA. Cumberland Council should be consulted on any issues regarding this area.

Parramatta station area

- It is noted that heritage items within the Parramatta metro station construction site are proposed to be retained and protected including the Victorian Regency terraced shops at 41 – 45 George Street, Kia Ora Georgian house at 64 Macquarie Street and the Convict Drain.

- Items adjoining the site include the Roxy Theatre at 67 – 69 George Street and the Horse Parapet Facade on the corner of Macquarie Streets and Church Streets.
- The management plan appears to identify appropriate measures to protect these items during demolition of surrounding buildings. Measures include particularly the erection of scaffolding with shade cloth around heritage buildings and also relate to vibration control and monitoring.
- However, it should be ensured that the extent of protection of the identified heritage items is not less than the area identified in the heritage maps for the items in Parramatta LEP 2011 and or in the State Heritage Register if relevant.
- There is concern that the Heritage Management Plan does not identify the significant Aboriginal and European archaeology of the site. Whilst assurances have been provided that this contract does not involve any significant excavation that could affect the archaeological resources the significant archaeology should be usefully referenced in the Heritage Management Plan.

Clyde construction site

- It is noted that Figure 9 Clyde Site Heritage Items map of the main Delta Group Site Establishment Management Plan correctly identifies the heritage items within the construction area being the RTA Depot on Unwin Street and wetlands. This map is not included in the Heritage Management Plan. Adjoining the property on Shirley Street is the heritage listed Capral Aluminium Building.
- The wetlands listing should be referenced in the Heritage Management plan and measures provided for its protection, including no removal of vegetation.
- It should be ensured that the extent of the area of the RTA depot protected during demolition of buildings at the Clyde construction site is not less than the area shown on the heritage map and included with the Parramatta LEP 2011.

Thank you for consulting with City of Parramatta Council. If you have any queries or which to discuss these comments, please call or write.

Kind regards,

██████████
Transport Planning Manager | City Strategy

02 9806 5580 | 0427 840 254

City of Parramatta
126 Church Street, Parramatta NSW 2150
PO Box 32, Parramatta NSW 2124
cityofparramatta.nsw.gov.au



I acknowledge the Traditional Owners of the land I work on, the Darug Peoples, and pay my respects to their Elders past and present.

From: ██████████
Sent: Tuesday, 21 September 2021 9:54 AM
To: ██████████
Cc: SydneyMetroWest <SydneyMetroWest@transport.nsw.gov.au>; smwsdds.transport <smwsdds.transport@transport.nsw.gov.au>; Sydney Metro West Document Control

<SMW.DocumentControl@transport.nsw.gov.au>; [REDACTED]

Subject: RE: Metro West Clyde and Parramatta Demolition Management Plan Consultation Package for City of Parramatta for comment by 14 September

*****[EXTERNAL EMAIL] Stop and think before opening attachments, clicking on links or responding. *****

Thank you [REDACTED] that would be much appreciated

Regards

[REDACTED]

From: [REDACTED]

Sent: Tuesday, 21 September 2021 12:07 AM

To: [REDACTED]

Cc: SydneyMetroWest <SydneyMetroWest@transport.nsw.gov.au>; smwsdds.transport <smwsdds.transport@transport.nsw.gov.au>; Sydney Metro West Document Control <SMW.DocumentControl@transport.nsw.gov.au> [REDACTED]

Subject: RE: Metro West Clyde and Parramatta Demolition Management Plan Consultation Package for City of Parramatta for comment by 14 September

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi [REDACTED]

I am sorry I am running late on responses to these. But I do have a few comments provided by Council's SMEs that I would like to share.

I will send them through to you as late comments ASAP on Tuesday morning.

Kind regards

[REDACTED]
Transport Planning Manager | City Strategy

[REDACTED]

City of Parramatta
126 Church Street, Parramatta NSW 2150
PO Box 32, Parramatta NSW 2124
cityofparramatta.nsw.gov.au



I acknowledge the Traditional Owners of the land I work on, the Darug Peoples, and pay my respects to their Elders past and present.

From: [REDACTED]
Sent: Friday, 27 August 2021 11:27 AM
To: [REDACTED]
Cc: SydneyMetroWest <SydneyMetroWest@transport.nsw.gov.au>; smwsdds.transport <smwsdds.transport@transport.nsw.gov.au>; Sydney Metro West Document Control <SMW.DocumentControl@transport.nsw.gov.au> [REDACTED]
Subject: Metro West Clyde and Parramatta Demolition Management Plan Consultation Package for City of Parramatta for comment by 14 September

*****[EXTERNAL EMAIL] Stop and think before opening attachments, clicking on links or responding. *****

Hello [REDACTED]

Sydney Metro awarded the contract for the Parramatta and Clyde Demolition to Delta Group. These works are due to commence in October 2021 and completion of the work is expected to occur in October 2022.

Could City of Parramatta Council officers kindly review and provide comments on the attached Management Plans, namely:

- Site Establishment Management Plan
- Noise and Vibration Management Plan which includes the Noise and Vibration Monitoring Program
- Flora and Fauna Management Plan
- Heritage Management Plan

Each .zip file contains:

- A .pdf copy of the Management Plan
- A comments table as a spreadsheet
- A .pdf copy of the consultation letter signed by Stuart Hodgson

To achieve timely approvals, we would welcome your feedback on the attached plans by **14 September 2021** via email to [REDACTED]. Sydney Metro will hold a Stakeholder Workshop on 8 September 2021 where comments on the CEMP and sub plans will be discussed. An invitation to this workshop will be sent to you shortly. If you have any questions, please contact me.

Regards

[REDACTED]
[REDACTED]
Manager Project Interface Engagement
Sydney Metro West
M: [REDACTED]
E: [REDACTED]

Level 43, 680 George Street, SYDNEY 2000
PO Box K659, HAYMARKET, NSW 1240



I acknowledge the Traditional Custodians of the land on which I work and live, pay my respects to Elders past and present and recognise continued connection to country.



This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 **Consider the environment. Please don't print this e-mail unless really necessary.**

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 **Consider the environment. Please don't print this e-mail unless really necessary.**



27 August 2021

Attn [REDACTED]
Heritage NSW, Department of Premier and Cabinet
Locked Bag 5020
PARRAMATTA NSW 2124

Dear [REDACTED]

**Sydney Metro West Stage 1
Parramatta and Clyde Early Works Stakeholder Consultation**

Sydney Metro West is a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, with a target travel time of about 20 minutes between the two centres.

The Department of Planning, Industry and Environment assessed the first Sydney Metro West Environmental Impact Statement and granted approval for the Sydney Metro West Project Concept from Westmead to the Sydney CBD and station excavation and tunnelling between Westmead and The Bays on 11 March, 2021.

To enable construction of the Parramatta metro station and the Stabling and Maintenance Facility at Clyde, early demolition of existing buildings need to be undertaken on these sites before the tunnelling contractor begins their work.

Sydney Metro awarded the contract for the Parramatta and Clyde Early Works to Delta Group. These works are due to commence in October 2021 and completion of the work is expected to occur in October 2022.

As part of the preparation for construction and as required by the relevant planning approval, and in view of timeframes for delivery of the Sydney Metro West, Delta Group are seeking early input and feedback on the Construction Environmental Management Plan (CEMP) and its sub plans.

To achieve timely approvals, we would welcome your feedback on the attached plans by 14 September 2021. Sydney Metro will hold a Stakeholders Workshop on 8 September 2021 where comments on the CEMP and sub plans will be discussed. An invitation to this workshop will be sent to you shortly.

Please contact [REDACTED] (Environment Manager) on [REDACTED] should you have any questions.

Yours sincerely

[REDACTED]

[REDACTED]
Director, Project Environment, Sustainability and Planning, Metro West

Sydney Metro

Level 43, 680 George Street, Sydney NSW 2000 | PO Box K659, Haymarket NSW 1240
T 02 8265 9400 | sydneymetro.info | ABN 12 354 063 515



Our ref: DOC21/750903-4

██████████
Director, Project Environment, Sustainability and Planning, Metro West
Sydney Metro
PO Box K659,
Haymarket NSW 1240
By email: ██████████

Dear ██████████

**Post Approval Submission for comment for Sydney Metro West Stage 1
Parramatta and Clyde Early Works Stakeholder Consultation (SSI 10038)**

Thank you for your referral dated 27 August 2021 inviting comments from the Heritage Council of NSW on the above State Significant Infrastructure (SSI 10038) to address Modified condition of Approval sections: 5 (d); C13, D 13 to D33; D47; D 48; REMM NV16; REMM NV17 of the SSI consent.

The relevant SSD/SSI conditions are contained in Condition C13 of SSI approval 10038 issued on 11 March 2021.

The following documents were reviewed, and comments are provided as delegate of the Heritage Council of NSW:

- **Convict Drain:** It is unclear whether the exact position of the Convict Drain has been established as specified in MCoA D15 and D26. Furthermore, the document states:
 - *The Parramatta metro station construction site marginally encroaches on a portion of the curtilage of the convict drain heritage item, located beneath Macquarie Lane. Demolition of modern buildings on the site would not result in any substantial adverse heritage impact and would not result in the item's heritage listing eligibility being reduced.*
Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan.
 - This statement does not specify whether the drain will be damaged (or not), but only talks about “any substantial adverse heritage impact”. It is unclear how heavy machinery can be used in the demolition of modern buildings would not impact the drain if it is in the proposed works area. Further definitive statements are required about its precise location, the exact works being undertaken in those areas, the extent of likely damage (if any) and mitigation measures as outlined in MCoA D15. If the information is available at this stage of the project, the HMP should identify the point in the project it will be undertaken, when and how the HMP will be revised to address it.
- **Roxy Theatre:** The vibration damage from any works near the Roxy Theatre have been identified as being of above cosmetic level criteria
 - *The heritage item is predicted to experience vibration levels above the cosmetic damage screening criteria. It will be retained and protected by Delta during the*

demolition stage of the Project. Delta will carry out vibration monitoring throughout the Project at sites identified in the Noise and Vibration Management Sub Plan.

It is unclear how this statement will respond to MCoA D17, which states:

- *The Roxy Theatre, White Bay Power Station, the former State Abattoirs and the former RTA Depot facade fronting Unwin Street, must not be destroyed, modified or otherwise adversely affected, except as identified in the documents listed in Condition A1 of this schedule.*

Furthermore, the under *Vibration Screening Criteria*, the document states:

- *Exceedance of the cosmetic damage level will not require demolition to cease, but alerts the Site Manager to proceed with caution at reduced force or load, or reduce the number of vibration-generating plant/equipment items operating simultaneously. An exceedance will also require the Project Manager to implement alternative techniques pending further analysis of the vibration frequency content in order to determine any potential exceedance of the criteria presented in the NVMSA.*

HNSW notes that the management of heritage items under Condition D17 may require specific advice in the HMP and this is recommended for clarity. The document should address requirements to repair potential damage according to Condition C13(d) to this item and others referenced by the condition. It is currently silent on the requirements and how they will be addressed by the project in future. The document should be revised to address these aspects of the project.

As scaffolding and hoarding will be placed around the Roxy Theatre to protect the building from any inadvertent damage associated building demolition in the adjacent site, there is a danger that this may lead to illegal opportunities to enter the Roxy building (and hence may be subject to vandalism). The scaffolding surrounding this building should either be constructed to prevent access to the building or only accessible to authorised persons. Advice on the regularity of inspections should be addressed in this document.

- Victorian Regency terraced shops: The document states that the Victorian Regency terraced shops at 41-45 George Street will: *be retained and protected by Delta during the demolition stage of the Project. The heritage curtilage includes adjoining modern buildings that are not considered to have heritage significance, that will be removed as part of the demolition works.*

Further clarification is required as to what buildings the applicant proposes to demolish and the process undertaken to assess their significance.

- Curation, display and public access of artefacts: NAH8 states that:
 - *Sydney Metro would provide for the meaningful curation, display and public access of any artefacts collected. This may involve partnerships with museums, local heritage centres and/or universities.*

These elements are not addressed in the document. They may require amendment in future to address these parts of the condition based on the final extent of the archaeological collection. However, some advice on how it will be addressed in future – even timing for being addressed, should be included in the document now.

- Wrong Authority Agency: The wrong heritage authority agency has been specified under the section *Unexpected Finds Procedure*. The document should replace the term *Heritage Division* with *Heritage NSW, Department of Premier and Cabinet* in the areas discussing *Notification and Consultation*, and *Closeout and Reporting*.

Similarly, the Executive Director (not the *Director General* as stated in the *Environmental Reporting* section) of Heritage NSW should be advised in the event of an environmental incident, and this should be reported through the official established channels (in writing) and not verbally as stated.

- Unexpected Finds Procedure: Does not refer to the need to notify the Heritage Council of NSW under s146 of the *Heritage Act 1977*. This needs to be included to address legislative requirements. Lodgment of a s146 notification should be conducted by the new Heritage Management System (HMS) upon the discovery of relics of local or state significance.

If you have any questions regarding the above advice, please contact Dr [REDACTED], Senior Maritime Archaeologist at Heritage NSW, on [REDACTED] or [REDACTED]

Yours sincerely

[REDACTED]

[REDACTED]
A/ Senior Team Leader, Specialist Services
Heritage NSW
Department of Premier and Cabinet
As Delegate of the Heritage Council of NSW
23 September 2021

Minutes of Workshop

SMW Parramatta and Clyde Early Works Stakeholder Consultation Workshop

Date:	Wednesday, 8 Sept 2021	Times:	10:00am – 12:00pm
Venue:	Microsoft Teams		
Chairperson:	[REDACTED]	Minutes:	[REDACTED]

Attendees:		
[REDACTED]	Project Manager	Delta Group
[REDACTED]	Environment Manager	Delta Group
[REDACTED]	Acoustic Advisor	Acoustic Studio
[REDACTED]	Environmental Representative	Healthy Buildings International
[REDACTED]	Environmental Representative (Alternate)	Healthy Buildings International
[REDACTED]	Senior Comms Manager – Early Works	Sydney Metro
[REDACTED]	Communications Place Manager	Sydney Metro
[REDACTED]	Communications Place Manager	Sydney Metro
[REDACTED]	Project Manager, Interface	Sydney Metro (Chair)
[REDACTED]	Demolition & General Works Manager	Sydney Metro
[REDACTED]	Senior Manager, Environment	Sydney Metro
[REDACTED]	Manager, Environment	Sydney Metro
[REDACTED]	Senior Advisor Acoustics	Sydney Metro
[REDACTED]	Interface Manager	Sydney Metro
[REDACTED]	Interface Handover Manager	Sydney Metro
[REDACTED]	Environmental Coordinator	Sydney Metro
[REDACTED]	Project Engineer	Sydney Metro
[REDACTED]	Senior Team Leader Planning	NSW DPIE EES
[REDACTED]	Senior Conservation Planning Officer	NSW DPIE EES
[REDACTED]	Fisheries Manager, Coastal Systems Unit	DPI Fisheries
[REDACTED]	Transport Planning Manager, City Strategy	City of Parramatta
[REDACTED]	PDHPE Coordinator	City of Parramatta
[REDACTED]	Team Leader, Environ. Health Compliance	City of Parramatta
[REDACTED]	Snr Natural Resource Officer, Flood Plain	NSW DPIE EES
[REDACTED]	Flood Engineer, Water Floodplains & Coast	NSW DPIE EES
[REDACTED]	Noise & Vibration Consulting Engineer	Osterman Consult
Apologies:		
[REDACTED]	Senior Advisor, Heritage	Sydney Metro
[REDACTED]	Environment Officer, Heritage	Sydney Metro
[REDACTED]	Unit Head, Regional Operations	NSW EPA
Absent:		
[REDACTED]	Project Interface Engagement Coordinator	Sydney Metro

██████████	Acoustic Advisor (alternate)	Acoustic Studio
██████████	Senior Communications Manager - West	Sydney Metro
██████████	Operations Officer	NSW EPA
██████████	Operations Assistant	NSW EPA
██████████	Senior Operations Officer	NSW EPA
██████████	Manager Health and Building Services	City of Parramatta
Distribution:		
All above.		

Please note: any actions listed in these minutes are not directions under the Project Deed

Item	Time	Agenda item	For Action	Due
1.	10:00am	Welcome and Introductions		
1.1		PK held the Acknowledgement of Country	Note	-
1.2		PK provided a brief overview of the consultation process	Note	-
2.	10:10am	Project Overview		
2.1		Jl provided a strategic overview of Sydney Metro West Stage 1	Note	-
2.2		Jl listed the post-exhibition milestones and EIS determination	Note	-
2.3		Jl presented the planning process update (Slide 7)	Note	-
2.4		<p>Jl listed the workshop objectives</p> <p>Question by Stakeholder: Susan Harrison, NSW DPIE EES</p> <p>SH asked for clarity regarding the yellow outline of site boundaries on maps (Slide 6). Was the expectation is that the sites will be cleared and levelled?</p> <p>Response by John Ierokis, Sydney Metro:</p> <p>Yes. The contractor will clear and level the sites down to slab level.</p>	Note	-
2.5		<p>AL outlined the Phase C scope, key deliverables and demolition program which is scheduled to start at the end of October 2021. Works are to continue until October 2022, with cable pulling scheduled for December 2021 and restoration in early 2022 (Slide 8)</p> <p>Each site will involve the Principal Contractor occupying the blocks, undertaking all items of demolition activities to lowest slab, service & utility disconnections, service relocation retrenching and, strip and remediate various hazardous materials including asbestos, lead, dust PCB. A specialist subcontractor will be engaged for air monitoring in order to receive clearance, then the removal of soft furnishings will occur.</p> <p>The Principal Contractor will occupy footpaths outside of Standard Construction Hours to remove awnings. All demolition rubble is to be contained within site boundaries.</p> <p>Slide 9: The expected site possession date is Thursday 21 October 2021. The first couple of weeks will involve site establishment including set up of site amenities, fencing and hoarding, completed by late October-early November.</p> <p>Slide 10: Scope of works</p> <p>Slide 11: Parramatta Site: will engage with the archaeologist in order to undertake early investigations</p> <p>Slide 12: Westmead site: all buildings and trees, footings and driveways are to be removed, essentially Delta will flatten the site</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>Question by Stakeholder: [REDACTED]</p> <p>Please discuss protection of riparian zones in Clyde.</p> <p>Response by: [REDACTED] Delta Group: We will cover that later on in the presentation</p>		
3.	10:20am	Site Establishment Management Plan and Q&A		
3.1		<p><u>Slide 13:</u> AL and WD from Delta Group presented their approach to site establishment and management (SEMP).</p> <p>Points covered in presentation include: SEMP Objectives SEMP Requirements</p> <p><u>Slide 14:</u> Scope of Works for site establishment includes site setup, heritage ecologist walks, heritage salvage, Noise & Vibration (N&V) assessments, erection of hoarding</p> <p><u>Slide 15:</u> Site plans, site access at Clyde</p> <p><u>Slide 16:</u> All figures are in plan, includes setting up site amenities and traffic routes within site</p> <p><u>Slide 17:</u> Site establishment: Clyde</p> <p><u>Slide 18:</u> Site establishment: Parramatta</p> <p><u>Slide 19:</u> Site establishment: Westmead</p> <p><u>Slide 20:</u> Sensitive receivers: Clyde, divided up into mainly industrial and residential sensitive receivers</p> <p><u>Slide 20:</u> Sensitive receivers: Parramatta, mixed used sensitive receivers</p> <p><u>Slide 21:</u> Sensitive receivers: Westmead</p> <p><u>Slide 23:</u> Noise & Vibration. DNVIS has been prepared</p> <p><u>Slide 24:</u> Visual amenity, soil and water – have had, to date, limited access to site due to COVID restrictions</p> <p><u>Slide 25:</u> Biodiversity – no removal of vegetation is required. Minor tree trimming for hoarding or fencing is fairly limited, will also do required salvage of heritage items</p> <p><u>Slide 26:</u> Project Induction, toolbox talks, prestart meetings, training & awareness</p>	Note	-
3.2		<p>Question by stakeholder: [REDACTED] City of Parramatta: Is all demolition material hauled off-site? Is any demolition material stored on site?</p> <p>Response by: [REDACTED] Delta Group: There will be some storage of demolition material on site prior to its removal, however this will not be long term. We will generate, stockpile, clean and screen, then all materials will be removed from site.</p> <p><i>No further questions from stakeholders.</i></p>	Note	-
4.	10:31am	Construction Environmental Management Plan (Main Document) and Q&A		
4.1		WD presented the main document in the Construction Environmental Management Plan (CEMP) suite and Delta Group’s overarching principles of environmental management.	Note	-

Item	Time	Agenda item	For Action	Due
		<p>Presentation covered the following topic areas:</p> <p><u>Slide 28:</u> Scope of CEMP – takes into account EIS, the SSI10038 SMW approval, SM CEMF requirements and all relevant legislation, guidelines and standards</p> <p><u>Slide 30:</u> Objectives – outlines how Delta will manage their works to manage the environment and impacts to Sensitive Receivers</p> <p><u>Slide 31:</u> Key Roles and responsibilities:</p> <ul style="list-style-type: none"> - External (Environmental Representative, Acoustic Advisor) - Sydney Metro (Environmental Management, Community Engagement), - Delta (managers including senior, construction, environmental, site supervisor, wider project team and environmental consultants). - Sydney Metro appointed advisors; Osterman for Noise & Vibration; Occupational Hygienist Flora and Fauna, ecologist on board to completed pre and post-inspections <p><u>Slide 32:</u> Regulatory Requirements and Compliance, waste management</p> <p><u>Slide 33:</u> Environmental Control Maps (ECMs) are a key component of the CEMP. They provide details to the site team, currently in development. Indicates location of micro-bats or their habitat, any heritage, ERSED controls. Details Noise and Vibration mitigation measures and where air monitors will be installed. Not as detailed due to COVID restrictions but this will change in next couple of days as access to site is made available.</p> <p><u>Slide 34:</u> Training and Awareness: ECMs are to be incorporated into Toolbox talks to ensure that Delta’s scope is addressed.</p> <p><u>Slide 35:</u> Communication: SM have an internal team that looks after community engagement. Delta will feed any and all required information back into that team to ensure community notification is undertaken in a timely manner. Delta Project website will have project management plans. Project has a dedicated 24-hr complaints line and 1800 cards. Site noticeboard installed at each site will include these details as well.</p> <p><u>Slide 36:</u> Incident and Emergency Management: Delta have their own processes but will also include Sydney Metro’s processes.</p> <p><u>Slide 37:</u> Monitoring, inspections and auditing: inspections will generally occur on a weekly or fortnightly basis; Environment Review Group inspections will also be scheduled</p> <p><u>Slide 38:</u> Environmental Aspects Management: The requirement for specific sub-plans have been identified. Those that require external consultation review are Noise & Vibration, Flora & Flora and Heritage Sub-plans.</p> <p><u>Slide 39:</u> Air quality: Demolition is Delta Group’s specialty. It’s important to protect the environment but equally important to protect the health of workers. Environmental Management is taken very seriously by Delta Group.</p> <p><u>Slide 40:</u> Parramatta: three air quality monitors to be installed in indicative locations. Will provide real time data and alerts to stakeholders.</p> <p><u>Slide 41:</u> Clyde: one air quality monitor to be installed and it will be located nearest to residential properties. It would be moved with the works to be adjacent to the works. Similar approach to be implemented for Westmead.</p> <p><u>Slide 42:</u> Waste: Delta Group intends to divert of 95% of non-hazardous waste. This will be achieved by both on- and off-site segregation, depending on site logistics. Waste will be disposed to licenced facilities. Materials likely to be encountered include Asbestos Containing Materials (ACM) materials as well as lead paint. These, amongst other waste types, will be classified managed, tracked and disposed of accordingly</p>		

Item	Time	Agenda item	For Action	Due
		<p><u>Slide 43:</u> Surface Water management: not much water is expected on site therefore not much surface exposure management by ERSSED measures is envisioned to be required. Clyde has the closest waterway system which will still need to be considered.</p> <p>J1 – To clarify about management plans or documents being placed on project websites: Any plans or documents (i.e. forms) that are developed by Sydney Metro will be on Sydney Metro website. Any plans (i.e. management) or documents that are developed by Delta will be made available on the Delta Group website.</p> <p><i>No questions from stakeholders.</i></p>		
5.	10:50am	Short Break		
		<i>Break for 5 mins – back at 10.55am</i>	-	-
6.	10:55am	Noise and Vibration Management Plan and Q&A		
6.1		<p>MDS presented the management of noise and vibration (N&V) impacts during construction.</p> <p>Presentation slides covered:</p> <p><u>Slide 46:</u> N&V Management Purpose and Objectives</p> <p><u>Slide 47:</u> Requirements (MCoA) for N&V are very extensive, about 17 Conditions of Approval. In addition conditions relating to CEMF, CNVS, ICNG, as well as a range of other Australian and international requirements will also be applicable</p> <p><u>Slide 48:</u> Construction Hours: Although Out of Hours (OOH) Works are not expected there may be a possibility of them occurring. In that case MCoA 37 LIW or D39 OOHs Protocol will apply</p> <p><u>Slide 49:</u> OOH protocol required just in case even though it's not envisioned to be required. OOH assessed by ER and AA. OOH Works are subject to specific DNVIS for those works.</p> <p><u>Slide 50:</u> Noise receivers: Clyde – residential receivers to west, industrial receivers to south and east, stables to the north. Commercial receivers to NE are the most sensitive receivers. Slight potential of exceedances on the boundary. Clyde is considered to be fairly low impact overall, a couple of heritage structures are located in the vicinity. Demolition is mainly on structures within the site itself.</p> <p><u>Slide 51:</u> Noise receivers – Parramatta: Close to commercial receivers, no immediate residential receivers, impacts were considered low to medium (10-20m within site boundary). Vibration impact is of very minimal concern. Zero boundary receivers (i.e. those that share a common boundary) has potential for regenerated airborne noise which diminishes very quickly when you step away from boundary. Parramatta light rail on Macquarie street has potential for impacts (cumulative impacts) however these impacts are considered to be fairly minor. PLR consultation has been undertaken and is ongoing. Additional Mitigation Measures identified include letterbox (LB) drops and Specific Notification (SN) ahead of time.</p> <p><u>Slide 52:</u> Noise Receivers – Westmead: Very different situation in terms of Sensitive Receivers to Parramatta: primarily residential receivers to east, south and west, moderate impact expected but again assessed where works are closest point to receivers (i.e. boundary). School is located to southwest of the site.</p> <p><u>Slide 53:</u> Noise Criteria – RBLs and NMLs have been taken from SMW SSI10038 EIS. Due to COVID there are no updated calculations however there shouldn't be a great change expected in levels</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p><u>Slide 54:</u> Vibration Criteria – human comfort is not applicable as short term works.</p> <p><u>Slide 55:</u> Vibration Criteria including Safe Working distance</p> <p><u>Slide 56:</u> DNVIS – individually done for each of the sites based on scope of works, and noise generating activities:</p> <ul style="list-style-type: none"> o Scope of works o Receivers o Activity o Objectives o Assessment o mitigations <p><u>Slide 57:</u> Construction noise and vibration prediction tool</p> <ul style="list-style-type: none"> o Worst case impact o Equipment o Location 		
6.2		<p>Question by stakeholder: [REDACTED] Acoustic Studio</p> <p>Mark, can you comment on educational receivers near the Parramatta site? For example, University of New England?</p> <p>Extension to question by stakeholder: [REDACTED] Healthy Buildings International</p> <p>... and childcare and churches?</p> <p>Response by: [REDACTED] Osterman:</p> <p>An early learning centre was identified in Parramatta to the north east of the site, on the corner of George and Smith Streets. Given the distance from the child care centre, shielding by existing buildings and the fact that no works are occurring in that area, it was determined to be minimal or negligible noise impacts and compliant for childcare.</p> <p>The University is located in the southeast corner to our site. Because of the type of building and with consideration to façade reduction, noise impacts of University of NEW England were determined to be low. On the other side of Smith Street, a building appears to look like an old church, it is not used for classes. That building is empty for most of the time. On west side of Smith Street is a multi-level building, impacts of external noise to internal environment is considered to be low/ minimal and within criteria. South to Macquarie St,</p> <p>South from Macquarie Street there is also has a church. It is deemed low impact for two reasons.</p> <ol style="list-style-type: none"> 1) When calculations were complete, the potential noise levels do exceed, however, only that is for when the church is in use. That church is currently closed due to Covid restrictions. 2) When the church is open, services are only run on Sundays. We won't operate then (will only work during Standard Construction Hours) so it is considered low impact. <p>Comment by: [REDACTED] Sydney Metro:</p> <p>The Church on Macquarie Street is a drop-in centre for homeless 'Mission Australia'</p> <p>Response by: [REDACTED] Osterman:</p> <p>That is a good note. A caveat I would place on our work. We have been affected by COVID therefore we haven't been able to do proper ground-</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>truthing. Disclaimer that we have sourced our information from the EIS and done a lot of google and desktop research to determine latest uses of premises. There might be things like that that are missed at this stage.</p> <p>Jl also noted information came from Parramatta Light Rail website and plans as they are recently updated in December 2020 and is publically available. Delta Group have sourced data from many sources.</p> <p>Note from Stakeholder: [REDACTED] Parramatta City Council If you have trouble contacting neighbours, Council is able to assist.</p> <p>Question by Stakeholder: [REDACTED] Acoustic Studio Can you talk about alternative (lower impact) demolition methods too?</p> <p>Response by: [REDACTED] Delta Group: The low impact demolition methods are the adoption of pulverisers or methods that don't involve hammering. Hammering is where the most vibration and noise is generated on site. Delta Group have arranged equipment with pulverisers or sheaths that will allow demolition of structures without hammering methods. This is a significant control for site boundary properties. In regards to regenerated or structure born noise mitigation: We have focused on removing structure connections on boundaries to avoid vibration impacts.</p> <p>Question by stakeholder: [REDACTED] Healthy Buildings International Can you address heritage buildings in the vicinity of Parramatta and specific controls for them?</p> <p>Response by: [REDACTED] Delta Group: To the north there is a heritage group of shops. On Macquarie Street there are building with historical significance. These properties have an extreme proximity to works on site. We will put vibration monitors on those buildings. We will adapt a methodology taking into account the proximity of building. The main thing is that we will be placing monitors on those buildings. Vibration monitors have real time alerts. This means whenever we get a potential exceedance, we get an instant alert sent to a list of people (text and email). When equipment is in that area, if vibration approaches levels of concern, we get a text and works are to cease immediately. We then reassess our methodology to ensure compliance. As they are heritage buildings, we will consult a specialised heritage consultant on how to place monitors to avoid any adverse effects. There is also heritage on the west of Church Street (other side to site). Due to its location it is assessed as nil vibration impact.</p> <p>Question by stakeholder: [REDACTED] Sydney Metro Would you go back to vibration table? In relation to the cosmetic damage and safe working distances there seems to be disconnect with large hydraulic hammer being two metres and medium hammer being 22 metres. Is that an issue?</p>		

Item	Time	Agenda item	For Action	Due
		<p>I think your safe working distances they are too conservative. If you are proposing to meet 7.5 metres per second you will meet that with large hammer at about 4 metres.</p> <p>Response by: ██████████ Osterman Consult</p> <p>I agree – this table has been taken from a standard. Our calculations are more consistent with Sydney Metro. This table represents the assessment made of safe working for cosmetic damage.</p> <p>Our calculations are a lot smaller than listed here. This is in our impact statements. I can provide more information on our calculations if you would like.</p> <p>Question by stakeholder: ██████████ Sydney Metro</p> <p>The orange dots on schools are of concern in relation to vibration impact (in Westmead)</p> <p>Response by: ██████████ Osterman Consult</p> <p>Clarification that the colour was a reference to noise only for moderate impact in Westmead. There may be short periods of medium noise impact. It will be predominantly will be low impact.</p> <p>Question by stakeholder: ██████████ Healthy Buildings International</p> <p>Please confirm if Delta proposes to utilise the Construction Orders that provides for extended time on Sundays for works other than high impact. If so, it may impact places of worship and the like that operate on Sundays (OOHs).</p> <p>Response by: ██████████ Delta Group</p> <p>OOHW Sunday shifts won't be included. There is no intention to work Sundays at this stage</p> <p>Question by stakeholder: ██████████ Parramatta City Council</p> <p>How will you monitor Roxy Theatre vibration?</p> <p>Response by: ██████████ Osterman Consult</p> <p>Vibration monitor will be put on Roxy Theatre on the boundary of our site. Essentially management of the Roxy is going to be monitoring the building with real time monitoring system.</p> <p>Our alert level is 75% of absolute level. We will get alerted to a potential exceedance before it occurs.</p> <p>Question by stakeholder: ██████████ Parramatta City Council</p> <p>Noted that there are other heritage buildings around site: two on George Street including Lensor Barracks on Horwood Place and George Street intersection to keep in mind.</p> <p>Response by: ██████████ Osterman Consult</p> <p>It is important to note that vibration impacts from our works are minimal. Where works occur on the boundary, these properties are the greatest risk. We are using alternate methodologies to mitigate impact i.e. no hammer.</p>		

Item	Time	Agenda item	For Action	Due
		<p>The calculations show where works occur on site boundary that the buffer of surrounding streets mitigates impact. Anything not on our boundary has very minimal vibration impact.</p> <p>Question by stakeholder: [REDACTED] Sydney Metro Please outline Monitoring program scope.</p> <p>Response by: [REDACTED] Osterman Consult Permanent installed monitors providing immediate upload of data are able to look at the trending of data and send a real time text. This is a guide, they don't stay in one location, and monitors will be moved. May be supplemented by short term monitoring, complaints verify predictions, relocate the existing long term monitors.</p> <p><i>No further questions from stakeholders.</i></p>		
7.	11:38am	Flora and Fauna Management Plan and Q&A		
7.1		<p>WD presented the management of Flora and Fauna</p> <p><u>Slide 63:</u> Objectives <u>Slide 64:</u> Potential impacts <u>Slide 65:</u> Clyde: has been identified with the potential for most impacts to flora and fauna. Green indicates riparian zone (i.e. Duck Creek), red indicated potential micro-bats habitat. Mitigation measures may include relocation of bats in consultation with an ecologist. <u>Slide 66:</u> Parramatta: Extent of impact is very limited, basically only street trees will be potentially impacted. <u>Slide 67:</u> Westmead: This site is covered in landscape vegetation from residential landscaping. The whole site will be cleared. Some remnant species are located in the rail corridor but they will not be affected by the Delta Group scope of works. <u>Slide 68:</u> Mitigation Measures – ecologist inspection taking place in next week or so. <u>Slide 69:</u> Inspection / Monitoring & Reporting</p>	Note	-
7.2		<p>Question by stakeholder: [REDACTED] NSW DPIE EES I wanted to confirm that pre-clearance surveys are for all fauna just not threatened species. In addition, that nest boxes will replace any hollows lost.</p> <p>Response by: [REDACTED] Delta Group Yes, it will be a check for all Flora and Fauna in that inspection. Yes, ecologist will identify tree hollows and we will install nest boxes before clearing.</p> <p>Question by stakeholder: [REDACTED] DPI Fisheries In regards to protection of aquatic vegetation, what about the mangroves in Clyde? How will you identify and protect them from demolition works?</p> <p>Response by: [REDACTED] Delta Group: The works won't be impacting the riparian vegetation. Delta Group will install exclusion fencing to maintain exclusion zone from workers and vegetation. The only trees to be removed are on the physical site.</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>Question by stakeholder: [REDACTED] City of Parramatta</p> <p>In terms of riparian vegetation in Clyde, it is also heritage listed (in LEP) as wetlands. It should be noted as a heritage item.</p> <p>Response by: [REDACTED] Delta Group:</p> <p>Noted for management plan</p> <p>Question by stakeholder: [REDACTED] NSW DPIE EES</p> <p>Some buildings are close to vegetation. It is good to have a buffer where you can, that is, not have fencing installed right on the boundary of vegetation.</p> <p>Response by: [REDACTED] Delta Group:</p> <p>Noted for consideration - where we can safely to do so while still allowing work to occur.</p> <p>Question by stakeholder: [REDACTED] NSW DPIE EES</p> <p>In Table 1 of the draft Flora and Fauna management plan: the condition CB8 must be net increase of mature trees in the ratio 2:1. It is indicated in the plan that it is addressed in section 5.4. That section doesn't appear to address it. Will the draft be amended?</p> <p>Response by: [REDACTED] Delta Group:</p> <p>We need a thorough review of cross referencing in our management plans. The ratio of 2:1 will be provided by Sydney Metro. Delta will provide information on what trees have been removed and Sydney Metro will provide the 2:1 offsets.</p> <p>Comment by: [REDACTED] Sydney Metro:</p> <p>I confirm that that is correct. Delta will remove trees and provide a list of all removed (type of species and specific location). Sydney Metro will take this information and put into the trailing contracts so the company that builds the stations or stabling yard will have the necessary information to implement the 2:1 reinstatement.</p> <p>Comment from: [REDACTED] Sydney Metro:</p> <p>As that is a concept approval condition we could assess it in future EISs. Part off the offset may be brought into future stages of Sydney Metro West.</p> <p>Response by: [REDACTED] Delta Group</p> <p>It is an important part of our scope in that we are capturing that information to allow for future reinstatement.</p> <p>Question by stakeholder: [REDACTED] NSW DPIE EES</p> <p>Can we recommend when replacing to use local native vegetation. Can that be requested?</p> <p>Response by: [REDACTED] Sydney Metro</p> <p>That would be considered. We will use the contractor information to inform replacement.</p> <p>Question by stakeholder: [REDACTED] NSW DPIE EES</p>		

Item	Time	Agenda item	For Action	Due
		<p>Will that information identify if local, native or exotic?</p> <p>Response by: ██████████ Sydney Metro</p> <p>To confirm we wouldn't replace with exotics. We will have the opportunity to interface with Council to ensure Council are happy with species replacement etc.</p> <p><i>No further questions from stakeholders.</i></p>		
8.	11:45am	Heritage Management Plan		
8.1		<p>AL and WD from Delta Group presented their approach to heritage management (SEMP).</p> <p><u>Slide 70:</u> Heritage Management – includes retaining facades <u>Slide 71:</u> Non-Aboriginal Heritage – potential impacts <u>Slide 72:</u> Non- Aboriginal Victorian regency, Kia Ora Georgian House reasonable buffer area around building <u>Slide 73:</u> Non-Aboriginal Heritage - Parramatta Mall <u>Slide 74:</u> Aboriginal Heritage – Detail provided about potential impacts and mitigation measures, however fairly low impacts expected</p> <p>Question by stakeholder: ██████████ City of Parramatta</p> <p>Regarding aboriginal heritage in Parramatta: this area is identified as high aboriginal sensitivity due to the location of Parramatta sand body. Are you aware of that?</p> <p>Response by: ██████████ Delta Group:</p> <p>WD: We are aware of the Parramatta sand body, but excavation for this project is very limited.</p> <p>AL: Our scope includes one excavation services trench. Our scope otherwise is demolition to slab of area only.</p> <p>Response by ██████████ City of Parramatta</p> <p>So that's not considered? This is highly sensitive and present on site. Should just identify it.</p> <p>Response by ██████████ Sydney Metro:</p> <p>The Parramatta ██████████ will not be interacted with during Delta Group's portion of works. After this package we will undertake test excavation. It will be a separate scope of works and we will interface with you about that. We understand the concern and acknowledge - it is there, important and must be considered.</p> <p>We will provide more detail but it will be following this contract.</p> <p>Question by stakeholder: ██████████ City of Parramatta</p> <p>This scope won't have surface excavation?</p> <p>Response by: ██████████ Sydney Metro</p> <p>Very minimal surface excavation. Only involves the disconnection and rerouting of services. This is very minimal and will not go to the depth of the sand body. We can refer to our heritage team for more info on that.</p>		
			<p>Action: JI to liaise through PK to set up meeting with Parramatta City Council and Sydney Metro</p>	

Item	Time	Agenda item	For Action	Due
		<p>Action: JI to liaise through PK to set up meeting with Parramatta City Council and Sydney Metro heritage team regarding Parramatta sand body and project.</p> <p>MM noted that excavation of utility services in Delta Groups scope is not on top of sand body.</p> <p><i>No further questions from stakeholders.</i></p>	heritage team regarding Parramatta sand body and project.	
8.2		<p>Comment from [REDACTED] NSW DPIE EES:</p> <p>[REDACTED] I think there is value with such a long workshop to break it into 15mins slots so stakeholders can come in and out as needed.</p>		
9.	12:05pm	End of Meeting		
9.1		<p>The attendees were thanked for their participation by the Chairperson. Consultation closes next Tuesday, 14 September 2021.</p> <p>Minutes were kept by Sydney Metro and will be considered during the amendment of management plans by Delta Group.</p> <p>The minutes of this Consultation Workshop will also be presented as evidence of consultation to the NSW DPIE.</p>	Chair	-

Minutes of Workshop

SMW Parramatta and Clyde Early Works Stakeholder Consultation Workshop

Date:	Thursday, 9 Sept 2021	Times:	11:00am – 1:00pm
Venue:	Microsoft Teams		
Chairperson:	[REDACTED]	Minutes:	[REDACTED]

Attendees:

[REDACTED]	Project Manager	Delta Group
[REDACTED]	Environment Manager	Delta Group
[REDACTED]	Acoustic Advisor	Acoustic Studio
[REDACTED]	Environmental Representative	Healthy Buildings International
[REDACTED]	Communications Place Manager	Sydney Metro
[REDACTED]	Communications Place Manager	Sydney Metro
[REDACTED]	Project Manager, Interface	Sydney Metro (Chair)
[REDACTED]	Manager, Environment	Sydney Metro
[REDACTED]	Environment Officer, Heritage	Sydney Metro
[REDACTED]	Environmental Coordinator	Sydney Metro
[REDACTED]	Project Interface Engagement Coordinator	Sydney Metro
[REDACTED]	Manager, Engineering Services	Cumberland City Council
[REDACTED]	Team Leader, Transportation and Traffic	Cumberland City Council
[REDACTED]	Coordinator Infrastructure, Place Strategy and Planning	Cumberland City Council
[REDACTED]	Landscape Architect	Cumberland City Council
[REDACTED]	Senior Environmental Health Officer	Cumberland City Council
[REDACTED]	Acting Coordinator Infrastructure Strategy and Planning	Cumberland City Council
[REDACTED]	Noise & Vibration Consulting Engineer	Osterman Consult

Apologies:

[REDACTED]	Senior Advisor, Heritage	Sydney Metro
------------	--------------------------	--------------

Absent:

[REDACTED]	Acoustic Advisor (alternate)	Acoustic Studio
[REDACTED]	Environmental Representative (alternate)	Healthy Buildings International
[REDACTED]	Senior Comms Manager – Early Works	Sydney Metro
[REDACTED]	Senior Communications Manager - West	Sydney Metro
[REDACTED]	Demolition & General Works Manager	Sydney Metro
[REDACTED]	Senior Manager, Environment	Sydney Metro
[REDACTED]	Senior Advisor Acoustics	Sydney Metro
[REDACTED]	Strategic Planner	Cumberland City Council
[REDACTED]	Executive Manager, City Strategy	Cumberland City Council

██████████	Executive Assistant to Director Environment & Planning	Cumberland City Council
██████████	Director, Environment and Planning	Cumberland City Council
██████████	Team Leader, Environmental Health	Cumberland City Council
Distribution:		
All above.		

Please note: any actions listed in these minutes are not directions under the Project Deed

Item	Time	Agenda item	For Action	Due
1.	11:00am	Welcome and Introductions		
1.1		PK held the Acknowledgement of Country	Note	-
1.2		Attendees introduced themselves	Note	-
1.3		PK provided a brief overview of the consultation process	Note	-
2.	11:09am	Project Overview		
2.1		Jl provided a strategic overview of Sydney Metro West Stage 1	Note	-
2.2		Jl listed the post-exhibition milestones and EIS determination	Note	-
2.3		<p>Jl presented the planning process update (page 7 of presentation)</p> <p>Jl included note of closure of consultation period of Thursday, 14 September 2021. Please return comments by this date.</p> <p>Question by stakeholder: ██████████ Cumberland City Council What plans are we required to comment on by Tuesday? Has Council received them all?</p> <p>Response by: ██████████ Sydney Metro Yes, they were sent to Shona Porter</p> <p>Question by stakeholder: ██████████ Cumberland City Council We have received heavy vehicle local roads plan, construction management plan, and parking management strategy.</p> <p>Parking management is 22 pages; heavy vehicle is 22 and construction is 23 pages – however they are all belonging to Clyde. We don't have any detail of Westmead.</p> <p>Response by: ██████████ Sydney Metro We only require comments on four plans. These may not be the ones of interest to you. We may need to take the request offline.</p> <p>Question by stakeholder: ██████████ Cumberland City Council I don't have any relevant documents. Only the ones that belong to Clyde. The Tuesday deadline is too tight when I haven't got the documents to review yet.</p> <p>Response by: ██████████ Delta Group Today's workshop will still be useful in regards to getting an understanding of the scope of works</p>	<p>ACTION: Jl to go back and look at what was sent and whether there was an issue in documents. Jl outlined relevant documents that require consultation compared to other</p>	-

Item	Time	Agenda item	For Action	Due
		<p>ACTION: JI to go back and look at what was sent and whether there was an issue in documents.</p> <p>JI outlined relevant documents that require consultation compared to other documents that don't require DPIE submission.</p> <p>FOLLOW UP TO ISSUE DURING MEETING</p>	documents that don't require DPIE submission.	
2.4		JI listed the workshop objectives	Note	-
2.5		AL went through the Phase C scope, key deliverables and demolition program which is scheduled to start at the end of October 2021. Works are to continue until October 2022, with cable pulling scheduled for December 2021 and restoration in early 2022 (Slide 8)	Note	-
3.	11:22am	Site Establishment Management Plan and Q&A		
3.1		<p>AL and WD from Delta Group presented their approach to site establishment and management (SEMP).</p> <p>Points covered in presentation include:</p> <p>Slide 9: The expected site possession date is Thursday 21 October 2021. The first couple of weeks will involve site establishment including set up of site amenities, fencing and hoarding, completed by late October-early November.</p> <p>Please note: that some presentation slides have been skipped over as their content does not apply to Cumberland Council. Only the Westmead site is located within the boundaries of Cumberland Council Local Government Area.</p> <p>Slide 12: Westmead – all buildings are to be removed, footings, trees and vegetation finishing with B-class hoarding around the site.</p> <p>Question by stakeholder: ██████████ Cumberland City Council Will Alexandra Avenue be open while demolition activities are being undertaken?</p> <p>Response by: ██████████ Delta Group Yes. There may be times during our work, for example, when removing the awning on Hawksbury Road. When undertaking works on Hawksbury we will need temporary work zones of footpath and road lane. Similar situation will apply to Hassall Street properties.</p> <p>Slide 13: SEMP Objectives and Requirements</p> <p>Slide 14: Scope of Works for site establishment includes site setup, heritage ecologist walks, heritage salvage, Noise & Vibration (N&V) assessments, erection of hoarding</p> <p>Slide 19: Site establishment – Westmead: will occupy 3 Hassall street as a base for the rest of work area to demolish buildings</p> <p>Slide 21: Sensitive Receivers – Westmead: – predominantly surrounded by residential, school, more detail in Noise & Vibration</p> <p>Slide 23: Noise & Vibration. DNVIS has been prepared</p> <p>Slide 24: Visual amenity and Urban design, soil and water</p> <p>Slide 25: Biodiversity – no vegetation is required to be removed at Westmead.</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p><u>Slide 25:</u> Heritage – Salvage is not required or associated with these works</p> <p><u>Slide 26:</u> Training and Awareness: Project induction and Toolbox talks</p>		
3.2		<i>No further questions from stakeholders.</i>	Note	-
4.	11:35am	Construction Environmental Management Plan (Main Document) and Q&A		
4.1		<p>WD presented the main document in the Construction Environmental Management Plan (CEMP) suite and Delta Group’s overarching principles of environmental management.</p> <p>Presentation covered the following topic areas:</p> <p><u>Slide 29:</u> Scope: Captures relevant guidelines and standards</p> <p><u>Slide 30:</u> Objectives and targets – outlines how Delta will manage their works to manage the environment and impacts to Sensitive Receivers</p> <p><u>Slide 31:</u> Key Roles and responsibilities:</p> <ul style="list-style-type: none"> - External (Environmental Representative, Acoustic Advisor) - Sydney Metro (Environmental Management, Community Engagement), - Delta (managers including senior, construction, environmental, site supervisor, wider project team and environmental consultants). - Sydney Metro appointed advisors; Osterman for Noise & Vibration; Occupational Hygienist Flora and Fauna, ecologist on board to completed pre and post-inspections <p><u>Slide 32:</u> Regulatory requirements and compliance, waste management</p> <p><u>Slide 33:</u> Environmental Management Plans and ECMs: These are important tools to identify potential impacts and what mitigation measures are required on site e.g. noise monitoring</p> <p><u>Slide 34:</u> Training and Awareness: Ensuring that the understanding the impacts of activities is understood by workers</p> <p><u>Slide 35:</u> Communication & Community Engagement: Sydney Metro to work closely with Delta Group team to engage with community</p> <p><u>Slide 36:</u> Incident and Emergency Management, The stakeholder team will communicate with council in the event of an emergency or incident</p> <p><u>Slide 37:</u> Monitoring, inspections and auditing, inspections will generally occur on a weekly or fortnightly basis</p> <p><u>Slide 38:</u> Environmental Aspects Management: The requirement for specific sub-plans have been identified. Those that require external consultation review are Noise & Vibration, Flora & Flora and Heritage Sub-plans.</p> <p><u>Slide 39:</u> Air Quality: Management of dust is very important. Demolition is Delta Group’s specialty. It’s important to protect the environment but equally important to protect the health of workers. Environmental Management is taken very seriously by Delta Group. Air quality for Westmead is yet to be planned in detail but will be the same as what will be in place for Parramatta and Clyde. A very reliable alert system for exceedances is to be installed.</p> <p><u>Slide 40:</u> Air Monitoring: Will provide alerts, monitoring on site, real time bases. Allows Delta Group to be reactive to any matters that may arise.</p> <p><u>Slide 42:</u> Waste Management, Delta Group intends to divert of 95% of non-hazardous waste. This will be achieved by both on- and off-site segregation, depending on site logistics. Waste will be disposed to licenced facilities. Materials likely to be encountered include Asbestos</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>Containing Materials (ACM) materials as well as lead paint. These, amongst other waste types, will be classified managed, tracked and disposed of accordingly.</p> <p><u>Slide 43: Surface Water Management.</u> Westmead is fairly limited in regards to natural waterways but just as important is how stormwater is managed.</p> <p>WD noted that COVID has restricted access to site and therefore the ability to ground truth plans. Delta Group will be able to add more detail as COVID restrictions ease.</p> <p>WD noted Delta Group website will have all Delta Group management plans and docs. Sydney Metro website will have all Sydney Metro issued documentation.</p> <p>Jl explained that Sydney Metro have done an investigation about management plans.</p> <p>Jl offered to email Council right now with missing plans. Jl offered to send over Westmead CPAS and CTMP. There is only a construction parking and access plan for Westmead. There is no heavy vehicle for Westmead.</p> <p>AL provided clarity that Delta Group are developing a heavy vehicle plan for Westmead. Delta want to use a different route than the EIS details. This has not been submitted to Sydney Metro yet. This is expected early next week.</p> <p>Jl stated that if council would like to receive Sydney Metro can send four consultation packages for plans. Will also add CPAS and CTMP with Westmead included. Who would like to receive directly?</p> <p>Accepted</p> <ul style="list-style-type: none"> • [REDACTED] (SS) • [REDACTED] (NP) • [REDACTED] (AF) <p>Jl confirmed CPAS went out two days ago – have asked for comments on 17 September.</p> <p>SS confirmed the front page says CPAS Clyde.</p> <p>Jl thinks the incorrect document has been distributed. In the next 5-10 minutes Jl to send these documents. If you do not receive by end of workshop, please raise.</p> <p>Question by stakeholder: Adam Ford, Cumberland City Council CEMP refers to Appendix F for Flora and Fauna Management Plan but it is not included. Sydney Metro you will need to provide this document if you want comments.</p> <p>ACTION: Jl to investigate documents provided and follow up as necessary.</p> <p><i>No further questions from stakeholders.</i></p>	<p>ACTION: Jl to investigate documents provided and follow up as necessary.</p>	
5.	11:50am	Short Break		

Item	Time	Agenda item	For Action	Due
		<i>Break for 5 mins – back at 11.55am</i>	-	-
6.	11:57pm	Noise and Vibration Management Plan and Q&A		
6.1		<p>MDS presented the management of noise and vibration impacts during construction.</p> <p>Presentation slides covered:</p> <p><u>Slide 46:</u> Purpose and objectives. MDS emphasised the point that consultation with community about any particular sensitivities and mitigation mitigations needs to be incorporated as part of planning</p> <p><u>Slide 47:</u> Requirements (MCoA) for N&V are very extensive, about 17 Conditions of Approval. In addition conditions relating to CEMF, CNVS, ICNG, as well as a range of other Australian and international requirements will also be applicable</p> <p><u>Slide 48:</u> Construction Hours: Work will be undertaken during standard construction hours. If any work is required out of hours, such as emergency work, the appropriate approvals are required. If Risk levels are assessed and deemed high they will require review by the Secretary.</p> <p><u>Slide 49:</u> OOH protocol required just in case even though it's not envisioned to be required. OOH assessed by ER and AA. OOH Works are subject to specific DNVIS for those works.</p> <p><u>Slide 52:</u> Noise Receivers – Westmead: Delta works are considered low impact. Properties have been identified as moderate impact. Further information received after plan development shows receivers will be reclassified to low impact. This is due to type of residences and type of activities.</p> <p>Moderate impact is due to hammering impact. Hammering locations are limited. This allows reallocation of impact for those not located nearby. Noted school will be reclassified to low impact. Ground vibration not perceptible by the closest receivers. Residential received (RR) mostly compliant</p> <p><u>Slide 53:</u> Noise Criteria – RBLs and NMLs. RBLs sourced from EIS</p> <p><u>Slide 54:</u> Vibration Criteria: Vibration will be low as there is significant distance from site and nearest sensitive receivers. Minimal hammering, no occupied adjoining buildings.</p> <p><u>Slide 56:</u> DNVIS – individually done for each of the sites based on scope of works, and noise generating activities:</p> <ul style="list-style-type: none"> o Scope of works o Receivers o Activity o Objectives o Assessment o mitigations <p><u>Slide 57:</u> Construction Noise and Vibration prediction Tool: Demolition can be achieved without hammering and pulverisers therefore the predicted worse case impacts to sensitive receivers (SR) will be reassessed</p>	Note	-
6.2		<p>Question by stakeholder: [REDACTED] Cumberland City Council</p> <p>If we do receive a noise concern or complaint do we refer to the Sydney Metro 1800 number or to the Delta website?</p> <p>Response by: [REDACTED] Delta Group:</p> <p>Direct to the Sydney Metro 1800 number. Sydney Metro Communications team, could you please confirm?</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>Response by: [REDACTED] Sydney Metro: Yes, that is correct – any noise complaints, please redirect to the Sydney Metro 1800 hotline and we will respond.</p> <p>MDS added that we have ability to do attended monitoring or use the active monitoring at site to investigate complaint. Monitoring is reported on a weekly basis. Monitor has the ability to send text/email to notify of approaching levels of concerns.</p> <p><i>No further questions from stakeholders.</i></p>		
6.3		<p>MSD went through their approach to Noise and Vibration monitoring on the project.</p> <p>Presentation covered the following points:</p> <ul style="list-style-type: none"> Monitoring Program Scope Baseline Monitoring Data <u>Slide 57</u>: Monitoring Methods <u>Slide 61</u>: Continual Improvement and Corrective Action <p>MSD discussed how monitoring works. Once the 75% trigger level is triggered alerts will be sent to the broader project team.</p>	Note	-
6.4		<i>No further questions from stakeholders.</i>	Note	-
7.	12:16pm	Flora and Fauna Management Plan and Q&A		
7.1		<p>WD presented the management of soil and water impacts during construction and also covered Delta Group’s plans for:</p> <ul style="list-style-type: none"> Unexpected Contamination finds Unexpected Acid Sulphate and Potential Acid Sulphate Soil discovery Spill response procedure Water discharge procedure <p>Presentation covered the following:</p> <p><u>Slide 63</u>: Purpose, Objectives and Requirements <u>Slide 64</u>: Potential impacts <u>Slide 67</u>: Existing Environment - Westmead: The site is dominated by residential landscaping.</p> <p>The Ecologist will conduct a pre-inspection of the site, data will be provided to Sydney Metro at the backend of the project of the details of trees removed as Sydney Metro has a 2:1 ratio replacement strategy.</p> <p>No threatened species are anticipated at Westmead. Some remnant species are located in the rail corridor but they will not be affected by the Delta Group scope of works.</p> <p><u>Slide 68</u>: Mitigation Measures <u>Slide 69</u>: Inspection/ Monitoring and Reporting</p>	Note	-

Item	Time	Agenda item	For Action	Due
7.2		<p>Notes by: [Redacted] Sydney Metro:</p> <p>With regard to the context of the Flora and Fauna scope, the only Endangered Ecological Community (EEC) of concern is within the rail corridor and works will not be undertaken in that area. Main Flora and Fauna management is in the former residential backyards where there are some remnant trees.</p> <p>Adam, do council have any questions or concerns about the removal of trees that were located in the backyards? Is there anything you would like our team to include and address in their plans?</p> <p>Response by: [Redacted] Cumberland City Council</p> <p>I haven't been able to review the plan yet. It sounded like there will be an ecologist to inspect pre and during when trees are felled to determine if there is any habitat existing in trees and ensure any fauna is managed appropriately. You also mentioned a replacement strategy?</p> <p>Response by: [Redacted] Sydney Metro</p> <p>Yes, there is a 2:1 replacement strategy across whole project under our approval. Delta Group will do the tree removal but not replacement.</p> <p>Delta Group will provide us post-removal reports. Information that will be included is: how many trees were removed, their species and locations. At the end of the program the station builder will receive that list of trees removed and will action the replacement.</p> <p>They will need to include these replacement trees in the final landscape plan. Part of that would include a presentation to Council to show what we took out and ask what type of species etc. Council would like replaced. We are of the understanding that Council would not want exotics. You may want to swap out native species etc. The replacement that will be done later, in about 9 years' time (2029)</p> <p>Response by: [Redacted] Sydney Metro</p> <p>This will be captured in the Stage 3 EIS which is currently under consultation with Council.</p> <p>Response by: [Redacted] Cumberland City Council</p> <p>Yes that's good. We understand this is just demolition but it is good to understand the entire process. However we hope the conversations would start earlier than 9 years' time!</p> <p>There are other trees that aren't prominent but still native that have food and habitat function. We confirm that we are not interested in exotic trees.</p> <p>Removal appears to have an immediate impact. It would be good to know how the replacement strategy will unfold.</p> <p>Response by: [Redacted] Sydney Metro</p> <p>Near the end of this contract or after Delta Group have completed their Scope of Works we could tell you what was removed and Council can take that information and use it as they wish. We will still do the 2:1 replacement at a later stage.</p> <p>Question by stakeholder: [Redacted] Cumberland City Council</p> <p>I'm not familiar with what happens in future of this project. More information on that would be good.</p> <p>Response by: [Redacted] Sydney Metro</p>	Note	-

Item	Time	Agenda item	For Action	Due
		<p>In the future there probably won't be a station building on the station but there will be buildings on the block and the public domain to be handed over to Council. We are still in discussion with Council. This is not far along yet.</p> <p>The 2:1 replacement doesn't mean they all have to go onto this site. It would be a negotiation with Council for where the replacement tree locations are.</p> <p>Question by [redacted] Sydney Metro Request confirmation that email (containing correct management plans) sent during this Stakeholder Workshop were received. Confirmation everyone has received.</p> <p>Question by stakeholder: [redacted] Healthy Buildings International</p> <p>With the trees, is there any opportunity to provide logs that may be of value to Council?</p> <p>Response by: [redacted] Delta Group We could facilitate if there were parts Council wanted to salvage.</p> <p>Question by stakeholder: [redacted] Cumberland City Council If some had hollows that were of use for existing areas we could deposit in natural areas. Generally, not for parkland but for a natural area that would be nice. It would depend on if there were hollows inside the tree. That would come from an ecologist conducting an inspection.</p> <p>Question by stakeholder: [redacted] Healthy Buildings International How would that progress? Comments on management plan?</p> <p>Response by: [redacted] Delta Group I have noted to add to management plan to explore that.</p> <p>Question by stakeholder: [redacted] Cumberland City Council That would be good. To have the remnant ones.</p> <p>Question by [redacted] Sydney Metro Angus, is there a desire from Delta Group to stump grind the trees on site or take away?</p> <p>Response by: [redacted] Delta Group For native trees they will mulch on site, any large trunks or stumps will go off site. The stumps will be cut flush with surrounding land. Some large gums are there and they have a large trunk diameter. We won't mulch these ones on site, we will cut them to manageable sizes and move offsite.</p> <p>Question by stakeholder: [redacted] Cumberland City Council</p>		

Item	Time	Agenda item	For Action	Due
		<p>An ecologist will need to inspect the tree hollows initially. They'd be able to see pre mulch and cutting. We'd like to relocate to a natural area if possible. An ecologist will need to view on site before any cutting/mulching, to relocate hollows etc</p> <p>Question by stakeholder: ██████████ Cumberland City Council</p> <p>I support the idea to relocate trees that could be salvaged. We have very few in the LGA especially Westmead. Any chance of not mulching and salvaging and relocating according to what Adam has said would be a fantastic outcome.</p> <p>Response by: ██████████ Sydney Metro</p> <p>Delta Group can incorporate into plans.</p> <p>Question by stakeholder: ██████████ Cumberland City Council</p> <p>It would be good if an ecologist could point out first and contact Council. We don't have any of that kind of information right now, the only way we could find out is via an ecologist inspection.</p> <p>Response by: ██████████ Delta Group</p> <p>We will communicate via Sydney Metro and Phil Kelly to reach out to Council if we find anything suitable to relocate.</p> <p>Question by: ██████████ Delta Group</p> <p>To clarify, we would relocate hollows as portions of the tree not the entire tree?</p> <p>Question by stakeholder: ██████████ Cumberland City Council</p> <p>Yes. However they need to be identified before cutting so we can determine the extent of the hollow to make sure not to cut in wrong spot and allow them to be of useful in relocation.</p> <p>Council would then like to suggest where they will be relocated.</p> <p><i>No further questions from stakeholders.</i></p>		
8.	12:45pm	Heritage Management Plan		
8.1		<p>AL and WD from Delta Group presented their approach to heritage management (SEMP).</p> <p>Points covered in presentation include:</p> <ul style="list-style-type: none"> • <u>Slide 70</u>: Heritage Management • <u>Slide 73</u>: Non-Aboriginal heritage – nothing at Westmead that will require salvage • <u>Slide 74</u>: Aboriginal Heritage 		
8.2		<p>Any heritage items found will follow the Unexpected Heritage Finds Protocol should the need arise.</p> <p>No excavation is required in Delta Group's scope of works.</p> <p>Demolition activities is to ground slab level only.</p> <p><i>No further questions from stakeholders.</i></p>		

Item	Time	Agenda item	For Action	Due
8.3		<p>Question by stakeholder: [REDACTED] Healthy Buildings International Could we discuss traffic around the site? Where is site access located?</p> <p>Extension to question from [REDACTED] Sydney Metro Please also address the parking of construction workers' vehicles.</p> <p>Response by: [REDACTED] Delta Group AL showed a presentation of site office and vehicle access points. Detailed the following information:</p> <ul style="list-style-type: none"> • Delta will use access points <ul style="list-style-type: none"> ○ Car park at 143 Hawksbury Road ○ 3 Hassall Street garage ○ 27-29 Bailey street due to large access • Workforce will be less than 10-15 workers during hazmat and strip out and structural demolition • Site amenities location is indicated on map • On site car parking will be dedicated in the site. Also shown on map. • Overflow will rely on train station parking • No parking available for workers in local streets – this is time zone related. <p>Question by stakeholder: [REDACTED] Healthy Buildings International I know there is no soil and water management plan required. But what are the controls for water especially when trees are cleared. What erosion sediment controls on site?</p> <p>Response by: [REDACTED] Delta Group We will need to do ground-truthing when we take over the site. Currently we know the site falls towards the north-east. Our heaviest sediment controls will be in the bottom corner. Logs and sediment fences will be utilised. Sediment fences will also be located on the remainder of the site behind A-class hoarding. At final handover we won't be able to retain existing vegetation due to our vehicle needs during demolition. They will damage the existing vegetation that is present on site. We will look to apply an appropriate PVA sealant across the site for dust spread once we are gone. Once site is unoccupied the sealant product will seal the surface.</p> <p>Question by stakeholder: [REDACTED] Healthy Buildings International There might be leftover mulch to stabilise the surface?</p> <p>Response by: [REDACTED] Delta Group Potentially, we will discuss with Sydney Metro about how they want the site left.</p> <p>Question by stakeholder: [REDACTED] Cumberland City Council I tried to extract the files and it says the files are already existing?</p>		

Item	Time	Agenda item	For Action	Due
		<p>Response by: [REDACTED] Sydney Metro</p> <p>Every one of the zip files has the same consultation letters. It was one generic letter so you are OK to override that. Each management plan is different.</p> <p><i>No further questions from stakeholders.</i></p>		
9.	12:45pm	End of Meeting		
9.1		<p>The attendees were thanked for their participation by the Chairperson</p> <p>Minutes were kept by Sydney Metro and will be considered during the amendment of management plans by Delta Group.</p> <p>The minutes of this Consultation Workshop will also be presented as evidence of consultation to the NSW DPIE.</p>	Chair	-

D. ENVIRONMENTAL POLICY

ENVIRONMENTAL MANAGEMENT POLICY (04)



POLICY STATEMENT

As part of our commitment to achieving the principles of responsible environmental management, sustainability and protection of the natural environment in our worksites, we recognise our legal and moral responsibility to ensure that our activities, products and services are designed to protect and enhance the environment in the communities in which we operate, and our obligations to ensuring that our operations do not place the natural environment or the local community at risk of harm.

AIMS AND OBJECTIVES

We are committed to environmental improvement and prevention of pollution. We will achieve this by working with our customers, suppliers and the community. To achieve these objectives we will –

- develop, implement and maintain a management system that addresses the requirements of ISO 14001;
- reduce waste through innovative work practices and recycling practices;
- minimise environmental impacts by reduction of polluting substances produced by our operations, activities, products or services;
- minimise the impact of our operations on the neighbouring community;
- increase the use of environmentally acceptable materials, equipment and technology in place of those which are considered harmful;
- ensure that our suppliers follow acceptable environmental policies; and
- actively promote environmental awareness among workers, clients, customers and the general public

At Delta Group we recognise that the overall responsibility environmental sustainability rests with management, who will be accountable for the implementation of this policy. These responsibilities include –

- ensuring that all environmental policies and procedures are implemented;
- establishing measurable objectives and targets to ensure continued improvement aimed at the elimination of waste, pollution and environmental harm;
- encouraging consultation and co-operation between management, workers and stakeholders in matters which may affect or impact on the environment; and
- providing adequate resources to meet these environmental commitments.

Workers responsibilities include –

- following all environmental policies and procedures; and
- recognising and reporting hazards which may affect the health and well-being of the environment.

[Redacted Signature]
[Redacted Name]
CEO

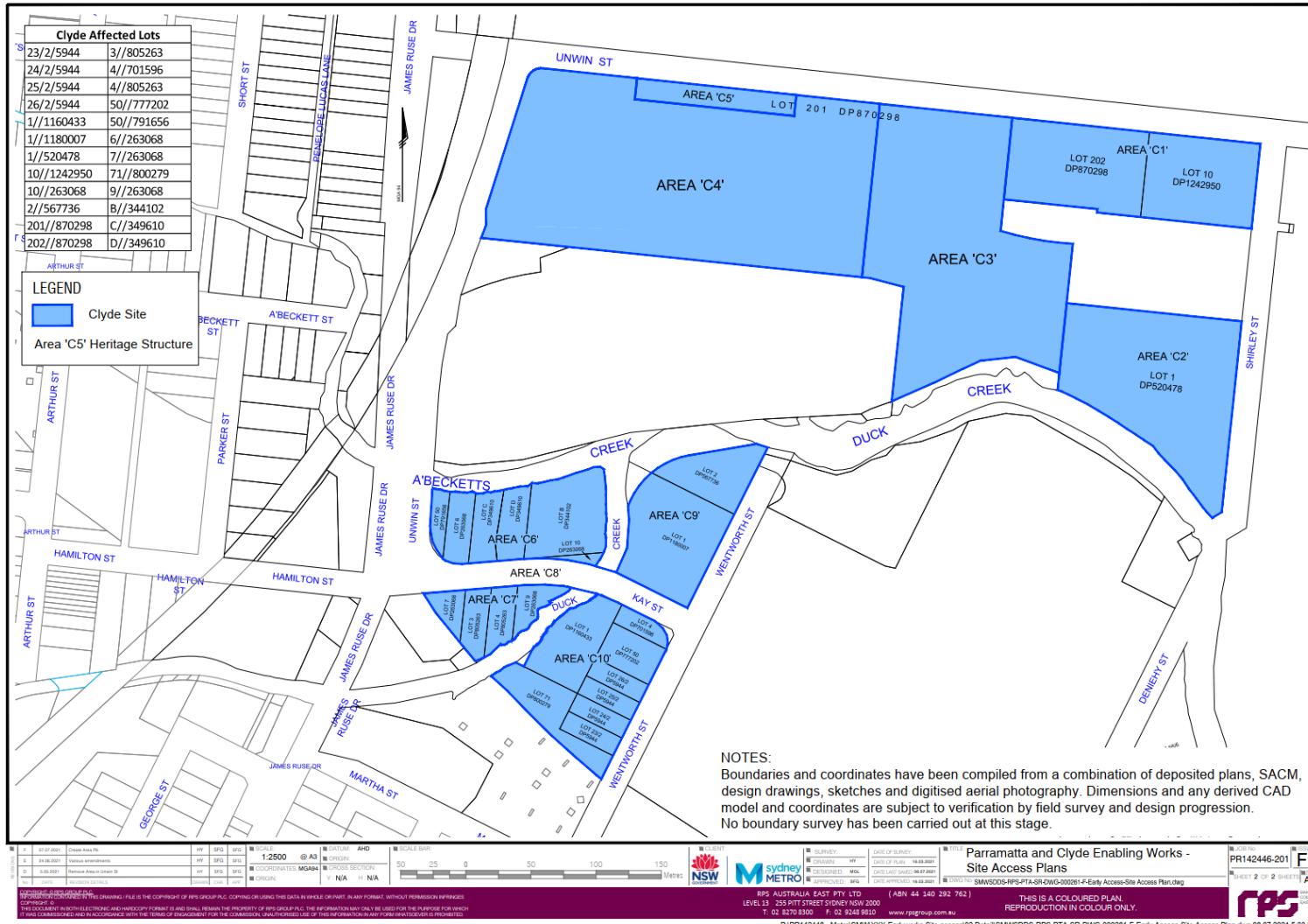
AUSTRALIA WIDE

Head Office: 577 Plummer Street, Port Melbourne VIC 3207 / Ph: 03 9646 8277 Fax: 03 9646 6877 / delta@deltagroup.com.au

E. CLYDE SITE IDENTIFYING RTA DEPOT

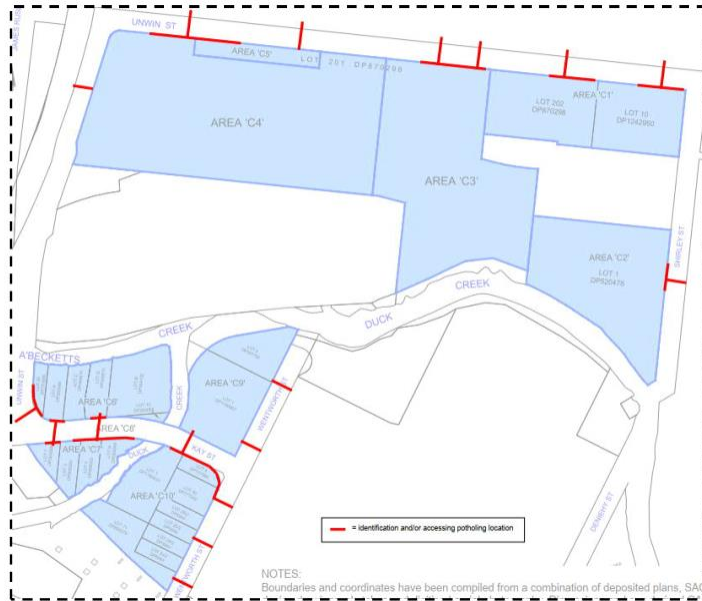
The Heritage RTA Depot at the

Clyde site is bounded by the area "Area 'C5'"

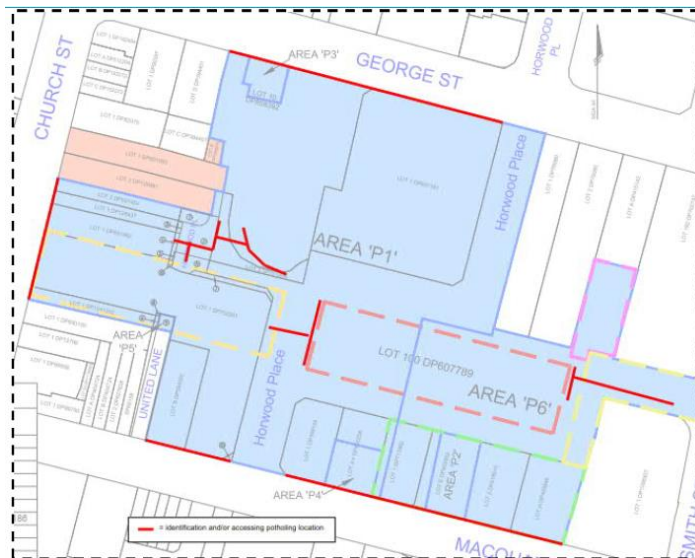


F. LOCATIONS OF EXCAVATION FOR SERVICE DISCONNECTION

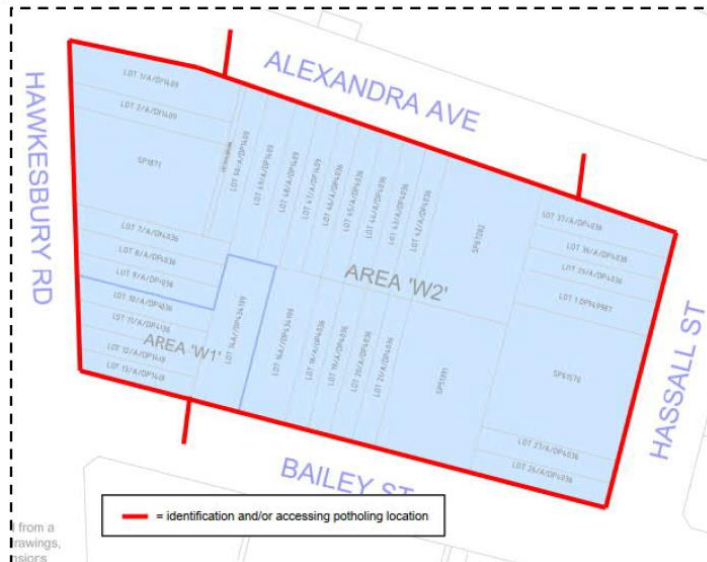
Clyde



Parramatta



Westmead





[REDACTED]
Director Sustainability, Environment and Planning
Sydney Metro West
PO Box K659
HAYMARKET NSW 1240

02/12/2021

Dear [REDACTED]

Sydney Metro West – Approval of PCWEW Heritage Management Plan Phase C (SSI-10038)

I refer to your submission dated 26 November 2021 requesting approval of the PCWEW Heritage Management Plan which was submitted in accordance with Condition C7 of the approval for the Sydney Metro West Concept and Stage 1 (SSI-10038). I also acknowledge your response to the Department's review comments and requests for additional information.

I note that the Sydney Metro West PCWEW Heritage Management Plan:

- has been prepared in consultation with relevant councils and Heritage NSW
- has been reviewed by Sydney Metro and no issues have been raised
- has been endorsed by the Environmental Representative
- contains the information required by the conditions of approval.

As nominee of the Planning Secretary, I approve the Sydney Metro West PCWEW Heritage Management Plan, Revision 3, 26 November 2021, pursuant to condition C10.

You are reminded that if there is any inconsistency between the approved document and the conditions of approval, then the requirements of the conditions of approval will prevail.

Please ensure that you make the Sydney Metro West PCWEW Heritage Management Plan publicly available on the project website.

If you wish to discuss the matter further, please contact [REDACTED] on [REDACTED]

Yours sincerely

[REDACTED]

[REDACTED]

Director – Infrastructure Management

As nominee of the Planning Secretary