

Parramatta Light Rail Supply, Operate and Maintain (SOM)

Construction Heritage Management Plan
(CHMP)

Parramatta Light Rail – Stage 1

November 2023

PLR1SOM-GLR-ALL-PM-PLN-000037 Revision 2



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Glossary / Abbreviations

Abbreviations	Expanded text
AHIMS	Aboriginal Heritage Information Management System
ARD	Historical Archaeological Research Design and Excavation Methodology
CEMP	Construction Environmental Management Plan
CoA	Condition(s) of Approval
CoPC	City of Paramatta Council
CSSI	Critical State Significant Infrastructure
DPE	NSW Department of Planning and Environment
ECM	Environmental Control Maps
EIS	Environmental Impact Statement
EIA	Environmental Impact Assessment
Environmental heritage	Places, buildings, works, relics, movable objects and precincts, of State or local heritage significance as outline in Section 4 of the <i>Heritage Act 1977</i>
EPO	Environmental Performance Outcomes
ER	Environmental Representative
ETS	Electronic Ticketing System
GRCLR	Great River City Light Rail
HAMU	Historical Archaeological Management Unit
Heritage Act	<i>Heritage Act 1997</i>
Heritage DPC	Heritage Division of the Department of Premier and Cabinet
HMP	Heritage Management Sub Plan
MM	Management Measures
OEH	Office of Environment and Heritage Where reference in the planning approval/ this document and consultation has been made to OEH it should be noted that it has been abolished from 1 July 2019. The Environment section is construed as a reference to

Abbreviations	Expanded text
	Department of Planning and Environment and the heritage component is construed as a reference to Department of Premier and Cabinet (DPC).
ONVR	Operational Noise and Vibration Review
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
REMMM	Revised Environmental Mitigation and Management Measures
Secretary	Secretary of the NSW Department of Planning and Environment (or delegate)
SPIR	Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Submissions Report (incorporating Preferred Infrastructure Report)
SHR	State Heritage Register

1 Introduction

1.1 Context

This Heritage Management Plan (HMP or Plan) is a Plan to the Construction Environmental Management Plan (CEMP) for the Parramatta Light Rail (PLR) Supply, Operate and Maintain (SOM) Contract (Package 5).

PLR is one of the NSW Government's major infrastructure projects being delivered to serve a growing Sydney. PLR will connect Westmead to Carlingford via Parramatta Central Business District (CBD) and Camellia. PLR is expected to be operational in 2024. More detailed description of the overall PLR Project is provided in Section 1.2.

The PLR Project received planning approval on the 29 May 2018 (SSI 8285) and has subsequently been modified twice with approvals issued on 21 December 2018 and 25 January 2019, respectively. This FFMP has been prepared to address the requirements of the Minister's Conditions of Approval (CoA), the Revised Environmental Mitigation and Management measures (REMMM) and Environmental Performance Outcomes (EPOs) listed in the *Parramatta Light Rail Stage 1 Westmead to Carlingford via Parramatta CBD and Camellia Environmental Impact Statement* (EIS), as amended by the *Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Submissions Report (incorporating Preferred Infrastructure Report)* (February 2018) (the SPIR) and all applicable legislation.

1.2 Background and project description

PLR will create new communities, connect great places and help both local residents and visitors move around and explore what the region has to offer. The route will link Parramatta's CBD and train station to a number of key locations, including the Westmead Precinct, the Parramatta North Growth Centre, the Western Sydney Stadium, the Camellia Town Centre, the new Powerhouse Museum and Riverside Theatre arts and cultural precinct, the private and social housing redevelopment at Telopea, the Rosehill Gardens Racecourse and the three Western Sydney University campuses.

In summary, the key features of PLR include:

- A new dual track light rail network of approximately twelve kilometres in length, including approximately seven kilometres within the existing road corridor and approximately five kilometres within the existing Carlingford Line and Sandown Line, replacing current heavy rail services
- Sixteen stops that are fully accessible and integrated into the urban environment including a terminus stop at each end of Westmead and Carlingford
- High frequency 'turn-up-and-go' services operating seven days a week from 5am to 1am. Weekday services will operate approximately every 7.5 minutes in the peak period
- Modern and comfortable air-conditioned light rail vehicles, nominally 45 metres long and driver-operated, each carrying up to 300 passengers.
- Intermodal interchanges with existing public transport services at Westmead terminus, Parramatta CBD and the Carlingford terminus
- Creation of two light rail and pedestrian zones (no general vehicle access) within the Parramatta CBD along Church Street (generally between Market Street and Macquarie Street) and along Macquarie Street (generally between Horwood Place and Smith Street)

- A stabling and maintenance facility (SaMF) located in Camellia for light rail vehicles to be stabled, cleaned and maintained
- New and modified bridge structures along the alignment including over James Ruse Drive and Clay Cliff Creek, Parramatta River (near the Cumberland Hospital), Kissing Point Road and Vineyard Creek, Rydalmere
- Alterations to the existing road network including line marking, additional traffic lanes and turning lanes, new traffic signals, and changes to traffic flows
- Relocation and protection of existing utilities
- Public domain and urban design works along the corridor and at Stop precincts
- Closure of the heavy rail line between Carlingford and Clyde
- Active transport corridors and additional urban design features along sections of the alignment and within Stop precincts
- Integration with the Opal Electronic Ticketing System (ETS)
- Real time information in light rail vehicles and at Stops via visual displays and audio.

An overview of the PLR route is shown in Figure 1-1.

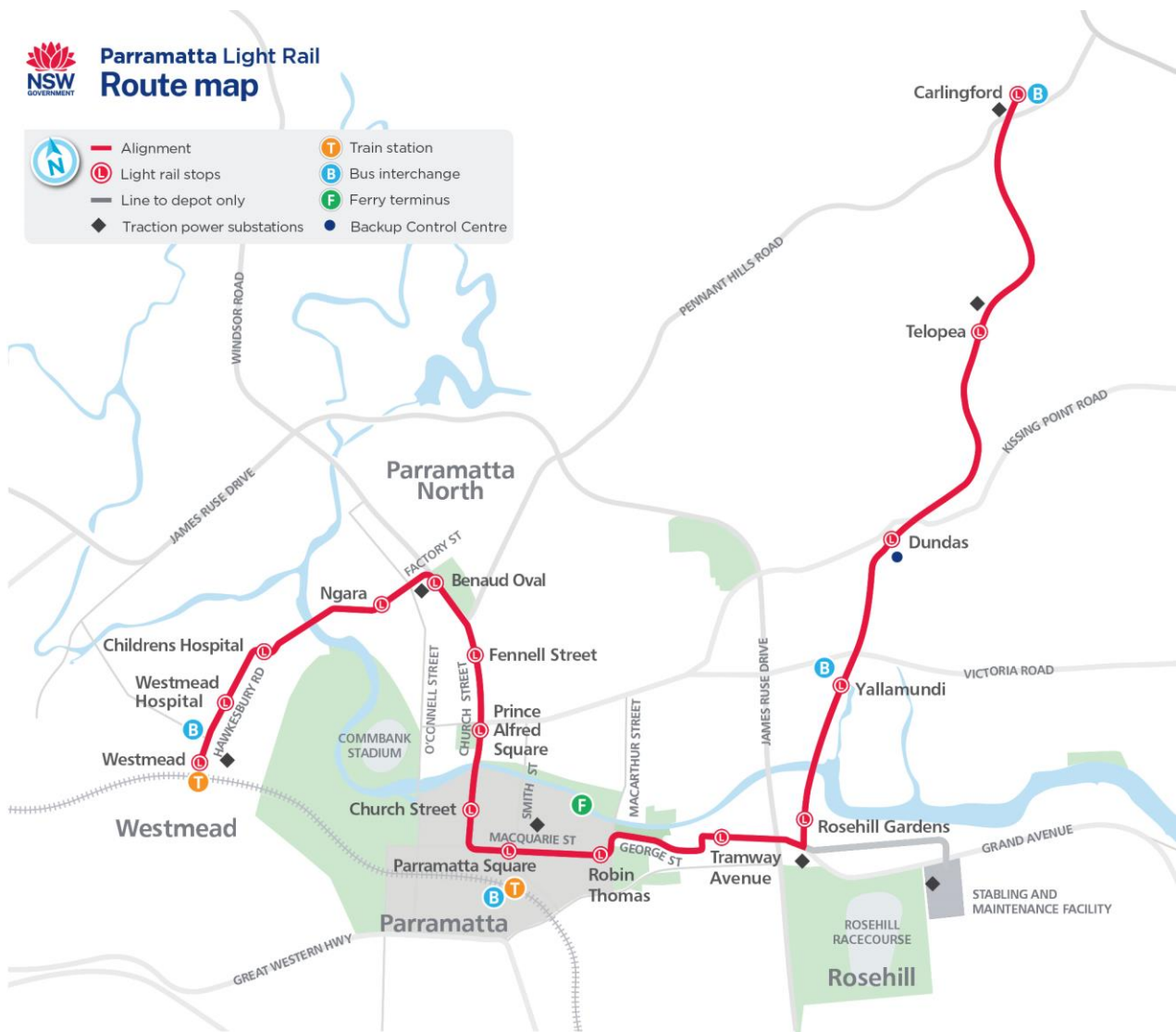


Figure 1-1: Parramatta Light Rail Route

1.2.1 Statutory context

PLR has been subject to environmental impact assessment under the *Environmental Planning and Assessment Act 1979* (EP&A Act). It is classified as Critical State Significant Infrastructure (CSSI). Detailed environmental impact assessments have been carried out and approved by the Minister for Planning.

1.2.2 Parramatta Light Rail planning approval

The Parramatta Light Rail was approved by the Minister for Planning on 29 May 2018, under Section 5.19 of the *Environmental Planning and Assessment Act (EP&A Act) 1979*. An environmental impact statement (EIS) was prepared as part of the infrastructure application (SSI-8285) as was a submissions and preferred infrastructure report (SPIR) following public exhibition of the EIS.

The Infrastructure Approval has subsequently been modified under Section 5.25 of the EP&A Act, with approvals issued on 21 December 2018 and 25 January 2019, respectively. The modifications related to changes to conditions of approval (CoA) not the physical description of PLR.

1.3 Staging of PLR works

The PLR comprises approximately 12km alignment from Westmead to Carlingford via Camellia and Parramatta CBD and consists of a mix of on-street and dedicated corridor.

PLR is being delivered under five delivery packages as detailed in the Staging Report:

- Enabling Works (**Package 1**) – Local road network improvements including O’Connell Street and George Street (off-alignment)
- Westmead Precinct Works (**Package 2**) – Hawkesbury Road widening and demolition at Cumberland Hospital (east and west Campus)
- Early Works (**Package 3**) – Remediation of the Stabling and Maintenance Facility (SaMF)
- Infrastructure Works (**Package 4**) – Design and construction of civil works, public domain and light rail infrastructure up to road level/top of rail and to the top of the concrete slab at stops, including provision of utility services (excluding high-voltage power supply and cabling for rail systems), and decommissioning of the T6 Carlingford Line
- Supply Operate and Maintain Works (**Package 5**) – The Project (subject of this Plan) Design and construction of the light rail systems, high-voltage power supply and stops above slab level, the supply of light rail vehicles, and the design and construction of the SaMF, including all light rail operations, customer service and asset management.

Each package of work is to be delivered under separate contracts on behalf of the proponent, Transport for NSW (TfNSW). While the packages will commence at different times under separate construction approvals, there will be periods during which the works packages will overlap. The interactions between the packages are shown in Figure 1-2.

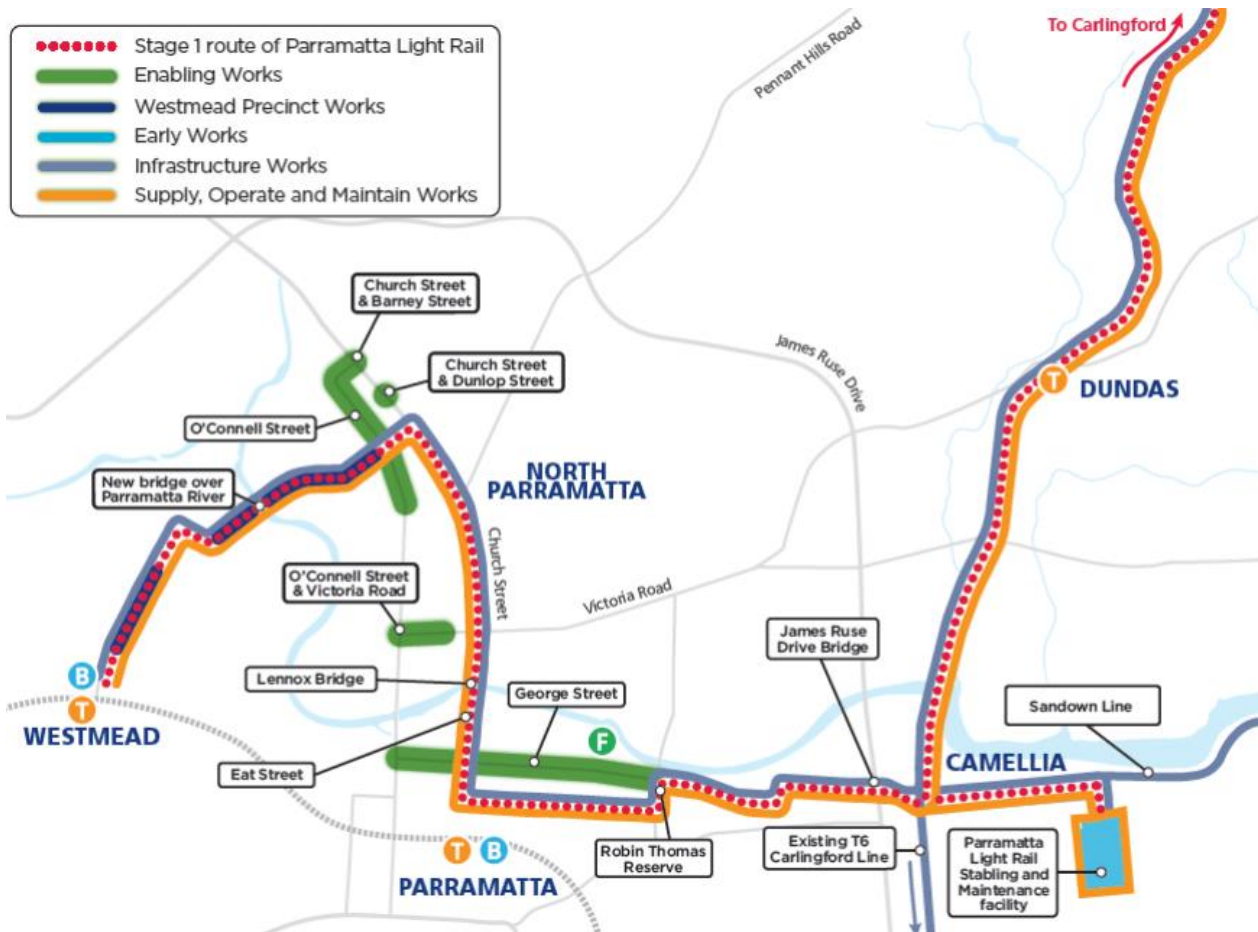


Figure 1-2: Parramatta Light Rail Delivery Strategy

1.4 SOM Contract (Package 5) overview

As System Integrator for PLR, the SOM Contractor's activities include:

- Delivery activities
- Light rail vehicle procurement
- Operation and maintenance.

The delivery activities include all investigation, selection, specification, design, approvals, construction, manufacture, installation, testing and commissioning, operational readiness and activities to transition from the delivery phase to the operations phase.

In summary the SOM package includes the following. Figure 1-3 further details these activities.

- All works above and additional to the platform concrete foundation slab at all stops
- Stabling and maintenance facility
- Central control system
- Light rail signalling system
- Elements of the road intersection signalling system
- Communications and passenger information systems
- Power Supply system
- Procurement of light rail vehicles (LRV)
- Maintenance plant and machinery for the LRVs
- Earthing and bonding, electrolysis and electromagnetic compatibility.
- Testing and Commissioning.

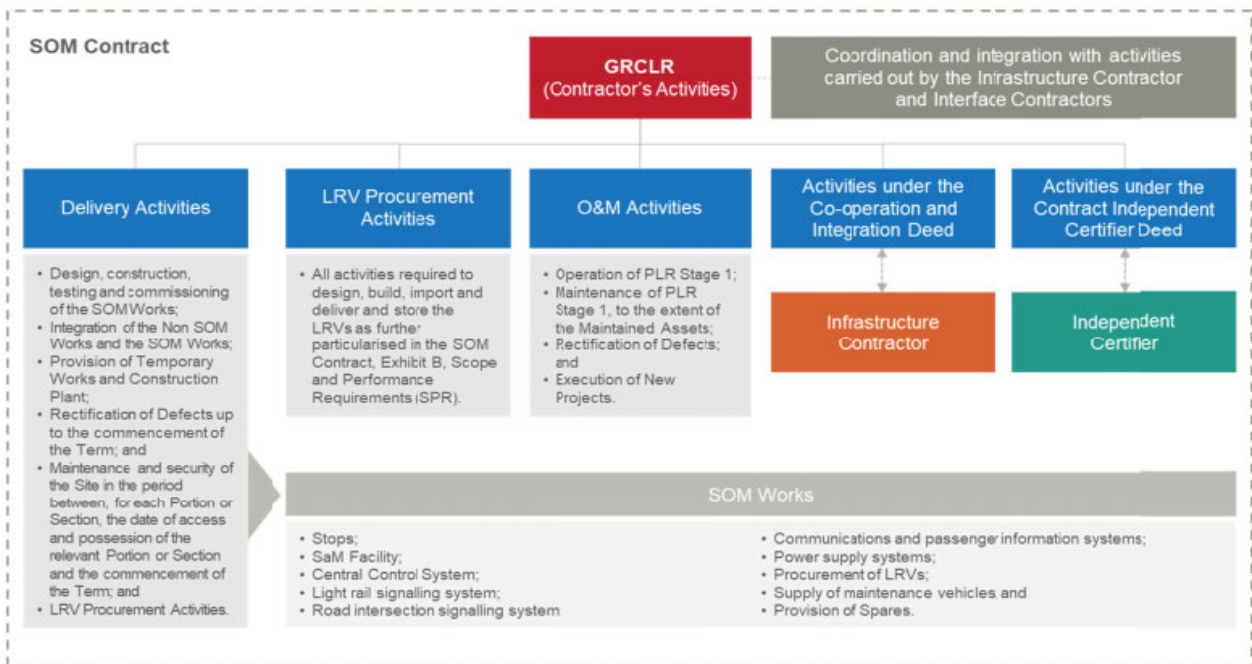


Figure 1-3: SOM Contract Activities for PLR

Great River City Light Rail (GRCLR) is responsible for the delivery of the SOM works for PLR. GRCLR has sub-contracted out the supply component of these works to Construcciones y Auxiliar de Ferrocarriles (CAF) who has engaged Thales, General Electric and Laing O'Rourke Australia (LORAC) to undertake the design and construction responsibilities associated with the supply component of the works, which includes the design and construction related activities including testing and commissioning, and excludes all operational and maintenance activities.

GRCLR is the owner of this Construction Heritage Management Plan (CHMP), as a subplan to the Construction Environmental Management Plan (CEMP) and is responsible for ensuring implementation of and compliance with this CHMP by all subcontractors during construction works of Package 5, which include the construction of the light rail systems, high-voltage power supply and stops above slab level, as well as the stabling and maintenance facility (the Project). Further detail on the Project is provided in Section 2.

The scope of works addressed in this CHMP in regard to potential heritage impacts is therefore limited to:

- Construction of the stabling and maintenance facility (SaMF) - There would not be any heritage impact as a result of this work as the area has been highly disturbed and the site has already been subject to heritage investigation, substantial remediation works including excavation, ground improvement and capping works. The SaMF is not within a listed heritage item.
- Construction of seven traction power stations (TPS) - There would not be any heritage impact as a result of this work. TPS 1, 2 and 3 are existing buildings which will be demolished (including basements and foundations) by Package 4, TPS 4, 6 and 7 are located within the old Carlingford line which is being decommissioned, cleared, and excavated by the Package 4 contractor, while TPS 8 is located at the SaMF site. Any subsurface works by SOM would be limited to existing utilities conduits or trenching in areas previously disturbed by Package 4 works or within the highly disturbed SaMF. Therefore there would be no archaeological impacts as a result of this work. TPS7 is within the locally listed Carlingford Stock Feeds (Carlingford Produce Store), listed on The Hills LEP 2012 (I46) and RailCorp s170 Register. Visual impacts to the Carlingford Stock Feeds and heritage items adjacent to most locations would vary from neutral to negligible.

- Construction of the Back-up Operations Centre (BOCC) is within the decommissioned Carlingford line, and on top of an on-site containment cell being constructed by the Package 4 Contractor. There would be no archaeological impacts as a result of this work.
- Set up and operation of four site compounds - There would be no subsurface works within the site compound locations therefore no archaeological management would be required. The compound sites are currently being used by Package 4 and would be used by SOM works. Any visual impacts related to construction would be temporary.
- Construction of sixteen tram stops - The stops would be constructed on the track slabs installed by Package 4 contractors. There would be no below ground impacts as a result of the tram stop installation and therefore there would not be any archaeological impacts. Five tram stops are within listed heritage items (Table 1-1).

Table 1-1: Tram stops within listed heritage items

Stop	Heritage Item	Register	Significance
Cumberland Hospital	Cumberland District Hospital Group	SHR (00820) NSW Dept of Health s170 (various items) Parramatta LEP 2011 (I00820)	State
Prince Alfred Square	Alfred Square (and potential archaeological site)	SHR (01997) Parramatta LEP 2011 (I686)	State
Rydalmere	Rydalmere Hospital Precinct (former)	SHR (00749) University of Western Sydney s170 Heritage and Conservation Register (various items), Department of Health s170 Heritage and Conservation Register (various items) Parramatta LEP 2011 (I00749)	State
Dundas	Dundas Railway Station Group	SHR (1133) RailCorp s170 Heritage and Conservation Register Parramatta LEP 2011 (I01133)	State
Carlingford	Carlingford Stock Feeds (Carlingford Produce Store)	RailCorp s170 Heritage and Conservation Register The Hills LEP 2012 (I46)	Local

1.4.1 Testing and Commissioning

The Testing and Commissioning (T&C) phase of Parramatta Light Rail – Stage 1 Supply, Operate, Maintain, Package 5 (SOM) includes the introduction of Light Rail Vehicles (LRVs) to the alignment, LRV testing and ramp-up to operational readiness, including a 28-day trial run period.

T&C is considered to be a ‘construction’ activity under the Infrastructure Approval (SSI-8285) and Environmental Protection Licence (EPL) 21606 and the subordinate management system framework. However, as T&C also incorporates movements of LRVs along the alignment, some approval conditions relating to rolling stock also apply. Therefore, T&C activities straddle ‘construction’ and ‘operation’ in a way that other SOM activities do not.

Key T&C activities (not necessarily in chronological order) include:

- A. Introduction of LRVs to the alignment:
 - i. Static testing of LRVs at the SaMF
 - ii. Localised infrastructure tests on the alignment without LRVs
 - iii. Running an LRV during the daytime from SaMF to Carlingford.
- B. Increased LRV running, incorporating:
 - i. Dynamic testing at the SaMF, including main depot interfaces
 - ii. Initial dynamic testing along the alignment (SaMF to Carlingford) with traffic controls
 - iii. LRV integration testing with signalling and communications system (SaMF to Carlingford)
 - iv. Initial dynamic testing along the alignment (Westmead to Tramway Avenue) with traffic controls, including movements near Cumberland Hospital
 - v. Broader dynamic testing along the alignment without traffic controls
 - vi. Driver training.
- C. Trial running on the alignment.
 - i. Full schedule trial running (28 days, 0500 to 0100).

1.5 Scope of this Plan

The scope of this HMP is to outline how GRCLR proposes to manage and control construction impacts to heritage. It has been prepared for the construction of Package 5 Activity A (Stabling and Maintenance Facility) and Activity B (remaining SOM works), as per the PLR Staging Report. Referred to as the Project.

This HMP applies to the construction of the stabling and maintenance facility (SaMF), and the entirety of the SOM works for the whole alignment including; Stops, Traction Power Stations (TPS), Back-up Operations and Control Centre (BOCC), and other sites (i.e. full SOM scope or construction works). It also covers all Testing and Commissioning activities prior to operations.

The HMP is applicable to all activities during construction including all areas where physical works will occur, or areas that may be otherwise impacted by the construction works, and which are under the control of the GRCLR. All GRCLR staff and sub-contractors are required to operate fully under the requirements of this Plan and related environmental management plans, over the full duration of the construction program.

The HMP is required to be submitted to the Secretary for information, at least one month before construction works commence in accordance with CoA C6. Construction would not commence until the HMP is submitted to the Secretary. Construction of each stage would not commence until the HMP for that stage have been submitted to and approved by the Secretary.

1.6 Relationship with other Packages

Infrastructure Works (Package 4)

The Infrastructure Works Package is closely aligned to the Package 5, SOM Works. A graphical representation of the split in scope between the two packages is depicted in Figure 1-4. The reason for dividing this work into two packages is to ensure that suitably qualified and experienced sub-contractors are in place for each specialised component; civil infrastructure, and operational systems. The Infrastructure Works will deliver the civil infrastructure components of PLR and will not trigger the operational conditions, except for those that relate to detailed design.

An interface between the two packages has been established to monitor cumulative impacts and the coordination of environmental complaints management, site management controls, and the delineation of incident reporting and non-compliance management.

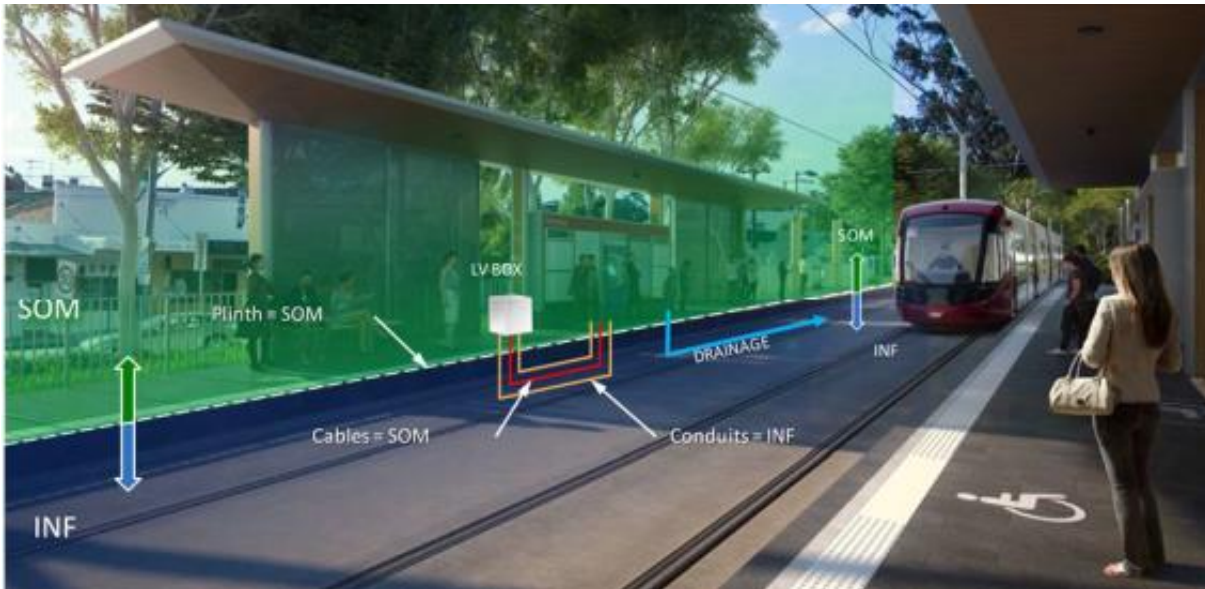


Figure 1-4: Relationship between Infrastructure Works and SOM Works

Early Works Remediation Contractor – Ventia (Package 3)

The SOM contract is dependent on the completion of the remediation works at the stabling and maintenance facility (SaMF) site, by the remediation contractor.

The SaMF site is subject to historical contamination and is a listed contaminated site by the Environment Protection Authority (EPA). The works have been split to ensure that appropriately qualified contractor, experienced in remediating heavily contaminated sites, is managing the remediation of the site. The remediation contractor will complete their works and provide GRCLR a remediated site, complete with a site audit statement, and supporting management documentation, fit for purpose for site establishment, construction and operational activities associated with PLR.

The remediation works will deliver the remediated site, including any details of any ongoing management requirements, and will not trigger the construction and operational conditions, except for those that relate to detailed design.

The Remediation Contractor will provide GRCLR with a Long Term Environmental Management Plan (LTEMP) for the SaMF, the LTEMP will include all construction, operation, management, maintenance and monitoring requirements for the SaMF. GRCLR will implement the requirements relevant to the construction of the Stabling and Maintenance facility.

Ongoing management for the remedial works on the SaMF site will be implemented through a Long Term Environmental Management Plan (LTEMP) which will be approved by the Site Auditor, as part of the issuing of the Site Audit Statement (SAS) for the site. The LTEMP will be a stand-alone document, and all monitoring and reporting will be managed through the processes and procedures in the LTEMP, and not through the SOM CEMP.

An interface between the two packages has been established to ensure the remediated site meets the design requirements for the construction, operation and maintenance of the site.

1.7 Environmental management systems overview

The construction of the Project will be managed in accordance with the GRCLR Integrated Management System (IMS) which includes an Environmental Management System (EMS). The EMS will be adopted as the guiding environmental management framework for the Project. The EMS is compliant with AS/NZS ISO 14001:2015. The EMS is integrated with the project wide IMS which includes assurance, quality and health and safety, management systems.

The EMS will guide the development of the Project’s governance documentation, including the Site Establishment Management Plan (SEMP), the CEMP and associated management plans (including this Plan), procedures and management tools to achieve the commitments and intentions established by the GRCLR Environment and Sustainability Policy, to ensure environmental performance and sustainability objectives and targets are achieved.

All works carried out on the site will be in accordance with:

- Minister’s Conditions of Approval (CoA) SSI-8285
- Revised Environmental Mitigation and Management Measures (REMMMs)
- Environmental Performance Outcomes (EPO’s)
- AS/NZ ISO 14001
- All applicable legislation
- Project Deed
- GRCLR IMS.

1.7.1 Construction Environmental Management Plan

A CEMP has been prepared for the SOM contract (Package 5). This CEMP provides the system to manage and control the environmental aspects of the SOM contract (Package 5) during construction. It also provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled. In accordance with CoA C8 construction will not commence until the CEMP and the associated management plans specified in CoA C3 are approved by the Secretary or provided to the Secretary for information (as required by CoA C3).

1.7.2 Environment management plans

Subject-specific environmental management plans have been prepared to support the CEMP. These documents were prepared to identify requirements and processes applicable to specific impacts or aspects of the SOM contract (Package 5). They address the relevant requirements of the CoAs, REMMMs and EPOs. A list of construction management plans for the SOM contract (Package 5) and their approval requirements are provided in Table 1-2.

Table 1-2: Environmental management plans

Document name	Document number	Approval pathway/ requirement
Traffic, Transport and Access Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000032	REMMM GEN-1 CoA C3 (a) REMMM TT-25
Flora and Fauna Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000033	REMMM GEN-1 CoA C3 (e) REMMM BI-3
Soil and Water Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000035	REMMM GEN-1 REMMM HY-6

Document name	Document number	Approval pathway/ requirement
Noise and Vibration Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000034	REMMM GEN-1 CoA C3 (b) REMMM NV-1
Heritage Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000037	REMMM GEN-1 CoA C3 (d) REMMM AB-2 REMMM HE-21
Air Quality Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000038	REMMM GEN-1 REMMM AQ-1
Construction Waste and Resource Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000039	REMMM GEN-1 REMMM WM-2
Contaminated Land Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000040	REMMM GEN-1 REMMM CM-3
Site Establishment Management	PLR1SOM-GLR-ALL-PE-PLN-001002	REMMM GEN-1 CoA C18 REMMM GEN-2
Flood Management Plan	PLR1SOM-GLR-ALL-PM-PLN-000047	REMMM GEN-1 CoA C3 (c) REMMM HY-4

2 Purpose and objectives

This section describes the purpose, objectives and targets of this CHMP.

2.1 Purpose

The purpose of this CHMP is to describe how Aboriginal and Non-Aboriginal heritage will be protected and managed during the Project in accordance with the Conditions of Approval (CoA), Revised Environmental Mitigation and Management Measures (REMMM) and Environmental Performance Outcomes (EPO).

2.2 Objectives

The key objective of the Plan is to ensure all CoA, REMMMs and licence/permit requirements relevant to Aboriginal and non-Aboriginal heritage are described, scheduled and assigned responsibility as outlined in the:

- EIS prepared for Parramatta Light Rail – Stage 1
- CoA granted to the project on 29 May 2018
- Transport for NSW's Unexpected Heritage Finds Guideline 3TP-SD-115/3.0
- SPIR
- REMMM and EPOs as presented in the SPIR
- Modified CoA approved on the 21 December 2018 and 25 January 2019
- PLR Staging report.

Compliance with the CSSI approval is also an objective of the plan.

2.3 Targets

The following targets have been established for the management of Aboriginal and non-Aboriginal heritage impacts during the Project:

- Comply with the relevant legislative requirements, CoA and REMMM
- Avoid impacts on known Aboriginal and Non-Aboriginal heritage items
- Follow procedures and ensure notification of any heritage objects/places uncovered during construction in accordance with the TfNSW Unexpected Heritage Finds Guideline included in Appendix A
- Provide heritage awareness training to all personnel including sub-contractors as part of the induction training before they start work onsite and in toolbox talks throughout construction
- Ensure Aboriginal Cultural Heritage Awareness Training is provided to all personnel in the form of inductions before they begin work on-site
- Consult with relevant stakeholders throughout the project in accordance with approval requirements
- Identify, investigate, record and assess the significance of any Aboriginal and non-Aboriginal archaeological resources before any further action, including harm, can take place
- Do not destroy, modify or otherwise physically effect heritage items (including Aboriginal objects), outside the CSSI footprint.

3 Environmental Requirements

This section describes the legal requirements that apply to this sub-plan.

3.1 Relevant legislation and guidelines

3.1.1 Legislation

Legislation relevant to heritage management includes:

- *NSW Environmental Planning and Assessment Act 1979*
- *NSW Heritage Act 1977 (Heritage Act)*
- *Commonwealth Environment Protection and Biodiversity Conservation Act 1999.*

All relevant legislative provisions are included in Appendix A1 of the CEMP.

3.1.2 Additional approvals, licences, permits and requirements

The nominated Excavation Director for the project is Dr Iain Stuart of Artefact Heritage.

3.1.3 Guidelines

The main guidelines, specifications and policy documents relevant to this Plan include:

- Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010) (for reference only)
- Archaeological Assessment Guidelines (NSW Heritage Office and DUAP, 1996)
- Assessing Heritage Significance (NSW Heritage Office, 2001)
- Assessing Significance for Historical Archaeological Sites and Relics (Heritage Branch, 2009)
- The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter (Australia ICOMOS, 2013)
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (Department of Environment Climate Change and Water, 2010)
- Conservation Areas (Heritage Office and Department of Urban Affairs & Planning, 1996)
- Criteria for the Assessment of Excavation Directors (Heritage Council of NSW, July 2011)
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011)
- Historical Archaeology Code of Practice (Heritage Council of NSW, 2006)
- NSW Heritage Manual (Heritage Office, Department of Planning, 1996)
- NSW Heritage Manual - Assessing Heritage Significance (NSW Heritage Office, 2001)
- Photographic Recording of Heritage Items Using Film or Digital Capture (Heritage Office, 2001, revised 2004, 2006)
- Skeletal Remains; Guidelines for Management of Human Skeletal Remains (Heritage Office, 1998)
- The principles of the Australia ICOMOS 'Burra Charter' for the conservation of culturally significant places provide the foundation for all assessments of Aboriginal and historical heritage (Australia ICOMOS, 2013)
- Transport for NSW Unexpected Heritage Finds Guideline 3TP-SD-115/3.0 (TfNSW, April 2016, revised April 2017)
- EC 2006 guideline 'Assessing Vibration – A Technical Guide' as this defines requirements for assessing the risk of building damage on heritage structures (Office of Environment and Conservation, February 2006)

4 Minister's Conditions of Approval

Table 4-1 lists the CoA relevant to the CHMP and Project scope of work. A cross reference is also included to indicate where the condition is addressed in this Plan or other Project management documents. Only the heritage conditions relevant to the scope of this sub plan are included in Table 4-1.

Table -4-1: CoA relevant to the CHMP

CoA No.	Condition Requirements	Document Reference	How Addressed
A1	<p>The CSSI must be carried out in accordance with the terms of this approval and generally in accordance with the description of the CSSI in the <i>Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Environmental Impact Statement</i> (dated August 2017) (the EIS) as amended by:</p> <ul style="list-style-type: none"> (a) the <i>Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Submissions Report (incorporating Preferred Infrastructure Report)</i> (February 2018, the SPIR). (b) SSI 8285 Administrative modification (November 2018) (MOD); and c) SSI 8285 Correction to Administrative modification (January 2019) (MOD 2). 	This table	This condition is provided as context for condition C1.

CoA No.	Condition Requirements	Document Reference	How Addressed
A5	<p>Where the terms 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 Secretary with the document or monitoring program or review. The evidence must include:</p> <p>(a) documentation of the engagement with the party(ies) identified in the relevant condition of approval before submitting the document for approval;</p> <p>(b) log of the points of engagement or attempted engagement with the identified party(ies) and a summary of the issues raised by the identified party(ies);</p> <p>(c) documentation of any follow-up with the identified party(ies), where feedback has not been provided, to confirm that the identified party(ies) has none or has failed to provide feedback after repeated requests;</p> <p>(d) outline of the issues raised by the identified party(ies) and how they have been addressed, including evidence that the party(ies) is satisfied the issues have been addressed; and where there are outstanding issues raised by the identified party(ies) that have not been adopted, the reasons why they have not been/could not be adopted must be provided, including evidence of consultation with the relevant party(ies).</p>	Section 7 CHMP Consultation Report	<p>Section 7 identifies the relevant parties contacted for consultation for all activities.</p> <p>A standalone Consultation Report will be prepared and submitted to DPE with this CHMP and includes documentation of</p> <p>(a) engagement with parties,</p> <p>(b) log of engagement with parties and issues raised,</p> <p>(c) documentation of follow-up with parties,</p> <p>(d) outline of issues raised, how addressed and evidence of close of consultation</p> <p>(e) any outstanding issues.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
C1	A Construction Environmental Management Plan (CEMP) must be prepared to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during construction.	This document is an appendix to the CEMP	<p>This condition is provided as context for condition C3(d). This CHMP outlines the management measures that will be implemented during construction to achieve the project performance outcomes and commitments.</p> <p>This CHMP is prepared for Stage 3 Activity B as per PLR Staging Report.</p>
C3	<p>The following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan and be consistent with the CEMP referred to in Condition C1:</p> <p>(d) Heritage – to be prepared in consultation with relevant Councils and OEH and submitted to the Secretary for approval.</p>	This document Consultation with relevant parties is set outlined in Section 7 and the HMP Consultation Report (Doc Ref PLR1SOM-GLR-ALL-EN-RPT-001010).	This CHMP has been prepared to demonstrate compliance with the condition. Consultation with relevant government stakeholders are outlined in Section 7. detailed in a standalone Consultation Report which will be lodged with DPE for information together this this subplan.

CoA No.	Condition Requirements	Document Reference	How Addressed
C4	<p>The CEMP Sub-plans must state how:</p> <ul style="list-style-type: none"> (a) the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved; (b) the mitigation measures identified in the documents listed in Condition A1 will be implemented; (c) the relevant terms of this approval will be complied with; and (d) issues requiring management during construction, as identified through ongoing environmental risk analysis, will be managed 	<p>Section 6 Section 10 Section 11</p>	<p>Section 6 lists the relevant EPOs, and mitigation measures which address the SSI conditions of approval applicable to this Sub-plan and describes how they have been addressed in the development of this Subplan. Compliance management and review which would address risk are addressed in Sections 10 and 11</p> <p>Ongoing environmental management performance and risk assessment is also outlined in Section 3.5 and Appendix A2 of the CEMP.</p>
C5	<p>The CEMP Sub-plans must be developed in consultation with relevant government agencies (including Relevant Council(s)). Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including all copies of correspondence from those agencies, must be provided to the Secretary with the relevant CEMP Sub-plan.</p>	<p>This document HMP Consultation Report</p>	<p>Consultation with relevant government stakeholders are outlined in Section 7 and detailed in Consultation Report.</p>
C6	<p>Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one month before construction.</p>	<p>This document</p>	<p>The CHMP will be submitted with or after the submission of the CEMP but in any event, no later than one month before construction.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
C8	<p>Construction must not commence until the CEMP and any CEMP Sub-plan specified in Condition C3 have been submitted to or approved by the Secretary. The CEMP and CEMP Sub-plans submitted to or approved by the Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where construction of the CSSI is staged, construction of a stage must not commence until the CEMP and Sub-plans for that stage have been submitted to or approved by the Secretary.</p> <p>Note: The requirement to submit or have a CEMP or CEMP Sub-plan approved is specified in Condition C3.</p>	Section 7.2	Construction will not commence until this Subplan has been submitted to and approved by the Planning Secretary (as outlined in Section 7). Once approved, this Sub-plan will be implemented for the duration of construction of the SOM construction works.
E43	The Proponent must conduct vibration testing before and during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In the event that the vibration testing and monitoring shows that the preferred dose values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures.	Noise and Vibration Management Plan	The noise and vibration assessment has been used to determine appropriate equipment selection to minimise potential vibration impacts. This will be verified through testing during works. No vibration intensive plant would be used for the SOM works. However, if vibration monitoring is deemed to be required it will be undertaken in accordance with the CNVMonP not this CMP.
E44	The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring of heritage-listed structures.	Noise and Vibration Management Plan	This is managed through the CNVMP not CHMP. Advice of a heritage consultant will be sought when the CNVMP identifies potential impacts from vibration.

CoA No.	Condition Requirements	Document Reference	How Addressed
E60	The Proponent must not destroy, modify or otherwise physically affect heritage items (including Aboriginal objects), outside of the CSSI footprint.	H2	<p>This is addressed as MM H2 and in the ECM, and will be communicated through SOM training packages.</p> <p>No works would occur outside areas approved for impacts. If unexpected heritage items are located the TfNSW Unexpected Heritage Finds Guideline would be followed.</p>
E61	Nothing in this approval permits the Proponent to harm, modify, or otherwise impact human remains uncovered during the construction and operation of the CSSI.	H3 Appendix A	<p>This is addressed as MM H3 and further detail on the procedure is provided in Appendix A.</p> <p>The Transport for NSW Unexpected Heritage Finds Guideline will be referred to in all induction documents and outlines processes to follow if human remains are located including stop work procedures and notifications to the Police and Coroner. .</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E62	<p>An Unexpected Heritage Finds Procedure must be:</p> <ul style="list-style-type: none"> a) prepared to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council or NSW of OEH; and b) certified by a suitably qualified and experienced archaeologist or heritage specialist. <p>The Procedure must be included in the Heritage Management Sub-plan required by Condition C3.</p> <p><i>Note: Human remains that are found unexpectedly during works are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.</i></p>	H3, Appendix A	<p>This is addressed as MM H3.</p> <p>Transport for NSW Unexpected Heritage Finds Guideline has been appended to this plan (Appendix A). The Transport for NSW Unexpected Heritage Finds Guideline meets the relevant guidelines in regard to Aboriginal and non-Aboriginal heritage.</p> <p>The TfNSW Unexpected Heritage Finds Guideline is considered appropriate by the project archaeologists and Excavation Director who have authored the Historical Archaeological Research Design and Excavation Methodology required by CoA E72.</p>
E63	<p>The Unexpected Heritage Finds Procedure, as submitted to the Secretary, must be implemented for the duration of construction and during operational maintenance works.</p>	H3, Appendix A	<p>The TfNSW Unexpected Heritage Finds Guideline will be adopted throughout construction as the nominated Unexpected Heritage Finds Procedure. This will be communicated through toolbox talks and daily pre-starts.</p>
E64	<p>The Proponent must prepare a Heritage Interpretation Strategy before work (excluding archaeological excavation required under Condition E70 and E71) which impacts on the items identified below commence which identifies and interprets the heritage values and stories of Aboriginal and non-Aboriginal heritage items, archaeology and heritage conservation areas associated with the CSSI. The Heritage Interpretation Strategy must be prepared and implemented in consultation with OEH and the Heritage Council of NSW (or its delegate). The Heritage</p>	INX 6 Monthly Report	<p>The Heritage Interpretation Strategy referred to in Condition E64 has been completed under Package 4 works and is not a requirement for SOM.</p> <p>The Heritage Interpretation Plan provided by SOM would focus on interpretation of tram stops and the SaMF site. All other elements are outside of the SOM scope.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
	<p>Interpretation Strategy must be submitted to the Secretary for information and include, but not be limited to a discussion of the key interpretive themes, stories, archaeological results, and messages proposed to interpret the history and significance of affected heritage items and heritage conservation areas including:</p> <ul style="list-style-type: none"> (a) Parramatta Female Factory and Institutions Precinct within the Cumberland District Hospital Group; (b) Lennox Bridge; (c) St Patrick’s Roman Catholic Cemetery; (d) The Convict Lumberyard (Arthur Phillip High School site) (e) Ancient Aboriginal and Early Colonial Landscape (Robin Thomas Reserve); (f) Queen’s Wharf Reserve and stone wall and potential archaeological site; (g) Dundas Railway Station Group; (h) Prince Alfred Square (and potential archaeological site); (i) Royal Oak Hotel and stables (and potential archaeological site); (j) Clyde Carlingford Rail Bridge abutments (Northern); and (k) Clyde Carlingford Rail Bridge abutments (Southern) 		<p>The Heritage Interpretation Plan is consistent with the Heritage Interpretation Strategy prepared by Package 4 which was prepared in consultation with OEH and the Heritage Council of NSW (or its delegate).</p> <p>Note: This is a design requirement and managed outside of this construction management plan.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E64a	<p>Within six months of the completion of any archaeological excavation and archival recording, the Heritage Interpretation Strategy in Condition E64 must be updated to include any additional heritage items identified and their interpretation.</p> <p>Note: Archaeological excavation and archival recording includes but is not limited to that required by Conditions E70 and E71 inclusive.</p>	H10	<p>Note that it is unlikely that archaeological items would be identified as excavation works are limited to areas that have been cleared by Package 4 works, or are within highly disturbed areas, and limited to minor utilities works.</p> <p>The Heritage Interpretation Strategy referred to in Condition E64 has been completed under Package 4 works and is not a requirement for SOM.</p> <p>If unexpected finds of State significance or Aboriginal objects are located, they would be included in an update to the Package 4 Heritage Interpretation Strategy within 6 months. If necessary, results would be input into the SOM Heritage Implementation Interpretation Plan.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E65	Identified impacts to heritage items and heritage conservation areas must be minimised through both detailed design and construction in consultation with the Heritage Council (or its delegate). The measures to manage this must be detailed in the Heritage Management Sub-Plan required by Condition C3.	H7 E65 Procedure (Appendix A2)	<p>All SOM infrastructure would be placed within the works corridor completed by Package 4 contractors, and on the SaMF site which is subject of significant remediation and ground improvement works by the Package 3 contractor.</p> <p>If an unexpected archaeological find of local or State significance was identified E65 would be triggered and the GRCLR E65 Procedure (Appendix A2) would be implemented. Consultation with the Heritage Council (or its delegate) would be required in order to demonstrate minimisation of impacts.</p>
E66	The Proponent must not destroy, modify or otherwise physically affect any structures within the Cumberland District Hospital Group or the curtilage of the Parramatta Female Factory and Institutions Precinct, except as identified in the documents listed in Condition A1.	This is addressed as MM H2 and in the Environmental Control Maps (ECM).	There would be no direct heritage impacts as a result of the SOM scope of works. The ECMs would identify no go zones to avoid inadvertent impacts.

CoA No.	Condition Requirements	Document Reference	How Addressed
E67	<p>The proponent must prepare an analysis of alternatives to demolition of CHIP Hostel No. 1 before the commencement of construction in Cumberland Hospital (East Campus) or any work in the Fleet/Factory Street intersection which would preclude consequential rail realignment if the CHIP Hostel No. 1 were to be retained. The analysis must be submitted to the Secretary stating a preferred option for approval. If demolition of the CHIP Hostel No. 1 is proposed, justification must be provided which considers the following guidelines included in the <i>Parramatta North Urban Transformation Consolidated Conservation Management Plan</i> (UrbanGrowth NSW, 2017):</p> <p>(a) that there is no prudent or feasible alternative;</p> <p>(b) demolition would result in no or minimal impacts on the heritage significance of the place or the wider Parramatta North Historic Sites; and</p> <p>(c) demolition would be of an overall benefit to the heritage significance of the place and the wider Parramatta North Historic Sites.</p> <p>Nothing in this approval permits the demolition of the CHIP Hostel No. 1 without the written approval of the Secretary.</p>	Not Applicable to SOM Scope.	TfNSW had previously made a decision that CHIP Hostel No. 1 will not be impacted. E67 is not triggered by the SOM scope of works. Staging report confirmed E67 is not triggered by the SOM Stage.
E69	<p>Before installing acoustic treatment at any heritage item identified in the documents listed in Condition A1 the advice of a suitably qualified heritage architect or heritage engineer with specific experience in built heritage must be obtained and implemented to ensure any such work does not have an adverse impact on the heritage significance of the item.</p>	ONVR	<p>An ONVR would be prepared in accordance with E48 which would identify which heritage structures required acoustic mitigation. Advice on minimising or mitigating impacts to significant fabric or visual impacts would be obtained from the nominated heritage consultant for each heritage item (if any) identified in the final ONVR.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E70	<p>The Proponent must prepare a Heritage Archival Recording and Salvage Report, including photographic recording of heritage items which have been identified for demolition or modification in the documents referred to in Condition A1 and outline the salvage to be undertaken from these items.</p> <p>Archival recording must be undertaken by a suitably qualified heritage specialist and prepared in accordance with 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>Within 12 months of completing the archival recording, or as otherwise agreed with the Secretary, the Proponent must submit the Heritage Archival Recording and Salvage Report to the Department, the OEH, Heritage Council of NSW, Relevant Council(s), relevant local libraries and local historical societies in the local government area</p>	Not Applicable to SOM scope.	No demolition is proposed for the SOM works. All archival recording of the PLR route would have been completed by Package 4 contractors. This condition would not apply to SOM works.
E71	<p>The Proponent must salvage material from heritage items identified in Condition E70. Following archival recording, the Proponent must identify options for sympathetic reuse of salvaged material (including integrated heritage displays) on the project or for other options for repository, reuse and display. Suitable repository location(s) must be established in consultation with Relevant Council(s) (or Registered Aboriginal Parties, where relevant). For any State Heritage-listed items or elements suitable for salvage, suitable repository location(s) must be determined in consultation with the Heritage Division of the OEH.</p> <p>Any residual items and materials (where appropriate) are to be made available, through a process to be developed by the</p>	Not Applicable to SOM Scope.	<p>A salvage strategy for the PLR route has been completed by Package 4 contractors. All salvage is being undertaken by other contractors prior to commencement of SOM works.</p> <p>No impacts to significant fabric would be undertaken as part of the SOM works. This condition would not apply to SOM works.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
	Proponent in consultation with the relevant council(s), to landowners within the locality from where the material originated.		
E72	<p>Before works within Zones 1 and 2 Historical Archaeological Management Unit (HAMU), the Proponent must engage a suitably qualified archaeologist whose experience complies with the NSW Heritage Council's <i>Criteria for Assessment of Excavation Directors</i> (July, 2011) (referred to as the Excavation Director) to oversee and advise on matters associated with historical archaeology (i.e. non-Aboriginal) and to prepare a Historical Archaeological Research Design and Excavation Methodology.</p> <p>Where the unexpected heritage finds procedure required by Condition E62 is triggered in a zone 3 location, the Excavation Director must oversee its implementation.</p>	Section 3.12	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. An ARD would therefore not be required.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>An Excavation Director has been nominated in the case of an unexpected find</p>
E73	<p>The Historical Archaeological Research Design and Excavation Methodology must to be submitted to the Heritage Council of NSW (or its delegate) for review and comment before finalisation. The Historical Archaeological Research Design and Excavation Methodology must:</p> <p>(a) be consistent with NSW Heritage Council Guidelines including:</p> <ol style="list-style-type: none"> i. Archaeological Assessments (1996); ii. Assessing Significance for Historical Archaeological Sites and Relics (2009), iii. Skeletal Remains (1998), and iv. Historical Archaeological Code of Practice (2009); <p>(b) include provision for early physical investigation of areas of impact identified as likely to contain State significant</p>	TfNSW Unexpected Heritage Finds Guideline H7 E65 Procedure (Appendix A2)	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. An ARD would therefore not be required.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>A Historical Archaeological Research Design and Excavation Methodology is not required for the works. If an unexpected find is located the TfNSW Unexpected Heritage Finds</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
	<p>archaeology in the research design to inform detailed design in these areas to avoid State significant archaeology. This must include, but not be limited to:</p> <ul style="list-style-type: none"> i. St Patrick’s Roman Catholic Cemetery; ii. Ancient Aboriginal and Early Colonial Landscape / Robin Thomas Reserve; and iii. The Parramatta Town Drains (where these alignments are unclear); <p>(c) provide for the detailed analysis of any archaeological relics discovered during the investigations;</p> <p>(d) include management options for discovered archaeological relics (including options for avoidance, salvage, and display or interpretation);</p> <p>(e) include procedures for notifying the Heritage Council of NSW (or its delegate) and Secretary of any relic as required under s146 of the <i>Heritage Act 1977</i>; and</p> <p>(f) if the findings of the investigations are significant, provide for the preparation and implementation of a heritage interpretation strategy.</p>		<p>Guideline and the GRCLR E65 Procedure would be implemented.</p> <p>Notification of a relic is addressed in H7</p>
E74	<p>Where excavation works are required in the vicinity of potential archaeological sites, the Excavation Director must be present to advise on archaeological issues and oversee excavation works. The Excavation Director must be given the authority to advise on the duration and extent of oversight required during excavation.</p>	Section 3.12.	<p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>Subsurface works that are likely to impact significant archaeology will not be undertaken as part of the SOM scope of works.</p> <p>If an unexpected find was located the Excavation Director would oversee assessment and management of the find.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E75	In the event that non-Aboriginal or post-contact archaeological relics are discovered, the Proponent must prepare an Archaeological Excavation Report containing the findings of any excavations, including artefact analysis and the identification of a final repository of any relics. The report must be submitted to the Secretary, for information, within 12 months of completing all archaeological investigations, unless otherwise agreed with the Secretary. The Archaeological Excavation Report must also be submitted to the NSW Heritage Council, the local library and the local Historical Society in the local government area. A copy of the Archaeological Excavation Report must be provided with the relics.	H8	<p>Archaeological management would not be required for the SOM works as subsurface excavation would be limited to areas that have been cleared by Package 4 works or are in highly disturbed context.</p> <p>An Archaeological Excavation Report would be prepared in the event of an unexpected find.</p>
E76	The Proponent must not harm, modify or otherwise impact Aboriginal objects associated with the CSSI except as authorised by this approval.	H2	<p>Aboriginal objects will not be destroyed, modified or physically affected, except as authorised by the CSSI approval.. Boundary fencing will be erected around the exclusion zones and these will be documented on EWMSs and ECMs.</p> <p>This has been included as a mitigation measure H2.</p>

CoA No.	Condition Requirements	Document Reference	How Addressed
E77	<p>Where previously unidentified Aboriginal objects are discovered during construction of the CSSI, all work should stop in the affected area and a suitably qualified and experienced Aboriginal heritage expert should be contacted to provide specialist heritage advice. The measures to consider and manage this process must be specified in the Heritage Management Sub-Plan required by Condition C3 and, where relevant, include registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.</p>	Appendix A	<p>Addressed in TfNSW Unexpected Heritage Finds Guideline: Where unidentified objects are discovered work will cease and a suitably archaeologist from the Artefact Heritage team will be contacted and attend site to advise on the nature of the object.</p> <p>As per the TfNSW Unexpected Heritage Finds Guideline work would not continue until the object and been assessed and management recommended.</p> <p>As certified (by the Heritage Specialist) a copy of the TfNSW Unexpected Heritage Finds Guideline has been appended to this plan (Appendix A).</p>
E78	<p>The Excavation Director must oversee and advise on work in the following locations:</p> <ul style="list-style-type: none"> (a) Cumberland Hospital East; (b) Harris Street Footpath / Robin Thomas Reserve; (c) PLR AFT 2; and (d) Sydney Turf Club Carpark. <p>Note: Work in the locations referenced in Condition E78 (a) - (d) that impacts Aboriginal archaeological sites is construction as defined in this approval. Any mitigation and salvage measures required to manage or mitigate impacts must be specified in the Heritage Management Sub-Plan required by Condition C3.</p>	Not Applicable to SOM Scope.	SOM subsurface works would not be undertaken within the Aboriginal sites listed in E78.

CoA No.	Condition Requirements	Document Reference	How Addressed
E79	Any Aboriginal objects discovered must be identified in the Heritage Interpretation Strategy required by Condition E65 and, where relevant, include registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.	H12	Address in MMH12. Any Aboriginal objects would be registered on AHIMS. In accordance with E65 the Package 4 contractors would be notified of any Aboriginal heritage finds which would be into their Heritage Interpretation Strategy.
E80	The Proponent must design and construct the CSSI in a manner that reduces visual and heritage setting impacts and ensures consolidation and rationalisation of kerbside infrastructure to avoid visual clutter.		SOM works are localised and within existing construction corridors. Works are mostly on the track and track stop footprint. Kerbside infrastructure is being installed by Package 4. SOM would maintain a tidy workplace and ensure that the temporary project footprint be minimised to mitigate impacts to heritage and the visual setting.
E84	The Proponent must investigate the feasibility of wire-free running along 'Eat Street', across Lennox Bridge, past Riverside Theatres and Prince Alfred Park and through the Parramatta North precinct with the objective of minimising visual impacts to the heritage values and physical impacts to the heritage fabric of these items. The Proponent must provide the results of the feasibility investigation to the Secretary, for information, before construction commences in these locations. If a decision is made not to provide wire-free running in the identified locations, supporting evidence must be provided in the feasibility assessment.	Not Applicable to SOM Scope.	This scope of works sits with Package 4 and is not relevant to the SOM works. Staging report confirmed E84 is not triggered by the SOM Stage.

CoA No.	Condition Requirements	Document Reference	How Addressed
E85	The Proponent must investigate the feasibility of grass track treatment running through the Parramatta North precinct and Ancient Aboriginal and Early Colonial Landscape/Robin Thomas Reserve with the objective of minimising visual impacts to the heritage values and physical impacts to the heritage fabric of these items. The Proponent must provide the results of the feasibility investigation to the Secretary, for information, before construction commences in these locations. If a decision is made not to provide grass track treatment in the identified locations, supporting evidence must be provided in the feasibility assessment.	Not Applicable to SOM Scope.	This scope of works sits with Package 4 and is not relevant to the SOM works. Staging report confirmed E85 is not triggered by the SOM Stage.

5 Revised Environmental Mitigation and Management Measures

Table 5-1 lists the REMMMs relevant to this Plan. This includes references to required outcomes, the timing of when the commitment applies relevant documents or sections of the environmental assessment influencing the outcome and implementation.

Table 5-1: REMMMs relevant to the CEMP

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-1	<p>Three archaeological management zones have been developed for the project to manage archaeology with varying levels of significance throughout the project corridor. The general mitigation and management measures to be applied to each management zone are outlined below. The precinct-specific measures identify which management zone(s) measures apply to each archaeological management unit (HAMU) within a precinct.</p> <p>» The following mitigation and management measures would be implemented for Zone 1 – State significant historical archaeology:</p> <ul style="list-style-type: none"> • A heritage induction would be carried out for all contractors, to be developed as part of the heritage management plan. • An Archaeological Research Design (ARD) would be prepared by a qualified archaeologist in accordance with Heritage Division requirements, prior to the commencement of works. The ARD would outline a 	Construction	H8	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. REMMM HE-1 is therefore not relevant to the SOM works. An ARD would not be required for SOM works.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>A heritage induction would be provided to contractors for all works areas.</p> <p>Where the TfNSW Unexpected Heritage Find Guideline is triggered the GRCLR E65 Procedure (Appendix A2) would be implemented and the Excavation Director must oversee its implementation during excavation. Where relics are discovered an Archaeological Excavation Report would be prepared.</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
	<p>methodology for the investigation, monitoring and/or salvage of archaeological resources.</p> <ul style="list-style-type: none"> • An excavation director who meets the NSW Heritage Branch requirements for directing State significant archaeological investigations must manage the works. • Impact or removal is generally unacceptable for State significant archaeology identified as being highly intact and if proposed should be justified appropriately by the excavation director. • In situ retention of archaeological remains would be considered in accordance with the ARD as required. • The NSW Heritage Division would be notified should intact State significant relics be unexpectedly identified. • Public engagement, such as open days or media releases, would be considered where feasible to inform the public of the archaeological findings and proposed management measures. • Post-excavation reporting, artefact analysis and relics conservation would be carried out if relics are identified. <p>» The following mitigation and management measures would be implemented for Zone 2 – Locally significant historical archaeology:</p> <ul style="list-style-type: none"> • A heritage induction would be carried out for all contractors, to be developed as part of the heritage management plan. • An ARD would be prepared by a qualified archaeologist in accordance with Heritage Division requirements, prior to the commencement of works. The 			

REMMM	Requirement	Timing	HMP Reference	How Addressed
	<p>ARD would outline a methodology for the investigation, monitoring and/or salvage of archaeological resources.</p> <ul style="list-style-type: none"> • Archaeological monitoring would be carried out by a suitably qualified excavation director, followed by open area salvage (if required). • Impact or removal is likely to be considered acceptable if appropriate mitigation and management measures are followed as outlined in the ARD. • Public engagement, such as open days, would be considered where feasible to inform the public of the archaeological findings and proposed management measures. • Post-excavation reporting, artefact analysis and relics conservation would be carried out if relics are identified. 			
	<p>» The following mitigation and management measures would be implemented for Zone 3 – Nil-low archaeological resource present:</p> <ul style="list-style-type: none"> • A heritage induction would be carried out for all contractors, to be developed as part of the heritage management plan. <p>Works are unlikely to impact on significant archaeological resources; however, an archaeologist would be engaged should any unexpected potential archaeological remains be encountered in accordance with an unexpected finds procedure.</p>			

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-2	<p>Archaeological salvage excavation would not be carried out prior to the preparation of an ARD. For this project, it is likely that the archaeological research designs would recommend archaeological salvage in the following instances:</p> <ul style="list-style-type: none"> » Where detailed archival research and understanding of modern disturbance (such as information to show the extent of previous sub-surface excavation, for example plans or drawings of a building’s basement level(s)) needs to be supplemented with more site-specific (on-ground) information to better define the archaeological potential and/or significance of the site. » In areas where access for excavation activities is not restricted by buildings or other structures. » Salvage excavation would generally be recommended in areas where there is a moderate to high potential for relics of local or State significance to be present. It would involve locating and recording any relics found prior to their removal by construction. Staged salvage excavation would be carried out after project approval. 	N/A	N/A	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. REMMM HE-2 is therefore not relevant to the SOM works. An ARD is not required and salvage excavation would not be undertaken.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-3	<p>Archaeological monitoring (i.e. the monitoring of construction excavation activities by a qualified archaeologist) would be carried out as required in accordance with the ARD to record any significant remains uncovered during excavation. Examples of where archaeological monitoring may be required include:</p> <ul style="list-style-type: none"> » Low impact construction activities (such as narrow trenching) in areas of moderate to high potential for local or State significant relics. » Areas with low potential to contain remains of State significance. 	Construction	H8	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. REMMM HE-3 is therefore not relevant to the SOM works. An ARD is not required and archaeological monitoring will not be required.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>Where the TfNSW Unexpected Heritage Find Guideline is triggered the GRCLR E65 Procedure (Appendix A2) would be implemented and the Excavation Director must oversee its implementation during excavation. Where relics are discovered an Archaeological Excavation Report would be prepared</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-4	<p>As detailed design progresses, opportunities to avoid or further minimise impacts to identified archaeological sites of State and local significance would be considered and documented in the design report.</p> <p>The project design would be sympathetic to identified potential archaeological resources items (i.e. in archaeological management Zones 1 and 2) and, where reasonable and feasible, minimise impacts to those resources. The detailed design for sections of the project that would impact on known archaeological resources would be developed in consultation with a qualified archaeologist and relevant stakeholders as advised (e.g. the OEH and City of Parramatta Council).</p>	N/A	N/A	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works so avoidance by design would not be part of the SOM works. REMMM HE-4 is therefore not relevant to the SOM works.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p>
HE-5	<p>An Exhumation Policy and Guideline would be prepared prior to construction as part of the heritage management plan, and would inform the unexpected finds procedure in relation to the unexpected discovery of human remains. It would be developed in accordance with the Guidelines for Management of Human Skeletal Remains (NSW Heritage Office, 1998).</p>	N/A	N/A	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. Works will not be undertaken in areas identified in the EIS assessment to potentially contain human remains (Prince Alfred Park). REMMM HE-5 is therefore not relevant to the SOM works.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-6	<p>The mitigation and management measures for Zone 1 – State significant historical archaeology would apply to the following HAMU:</p> <ul style="list-style-type: none"> » HAMU 4 – Cumberland Hospital (east). <p>The mitigation and management measures for Zone 2 – Locally significant historical archaeology would apply to the following HAMUs:</p> <ul style="list-style-type: none"> » HAMU 1 – Eastern side of Hawkesbury Road including the road corridor. » HAMU 2 – Western side of Hawkesbury Road including the road corridor. »HAMU 3 – Cumberland Hospital (west). 	Construction	Appendix A H8	<p>Subsurface works that are likely to impact significant archaeological remains will not be undertaken as part of the SOM scope of works. REMMM HE-6 is therefore not relevant to the SOM works.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p> <p>Where the TfNSW Unexpected Heritage Find Guideline is triggered the GRCLR E65 Procedure (Appendix A2) would be implemented and the Excavation Director must oversee its implementation during excavation. Where relics are discovered an Archaeological Excavation Report would be prepared</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-7	<p>In relation to HAMU 4 – Cumberland Hospital (east), the following mitigation and management measures would be implemented:</p> <ul style="list-style-type: none"> » Thorough archaeological investigation of potential archaeological remains associated with Mrs Bett’s House and the Lunatic Asylum would be required prior to the proposed excavation works commencing in these areas as required in accordance with the Zone 1 archaeological management measures. » Alternative construction methods would be identified and considered for the Grose Street Drain (local significance). Should impact to a section of the drain be unavoidable, archaeological investigation of this area would be carried out prior to excavation works. 	N/A	N/A	<p>Subsurface works will not be undertaken in HAMU 4 as part of the SOM scope of works. REMMM HE-7 is therefore not relevant to the SOM works.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p>
HE-8	In relation to HAMU 18 – The Town Drain – Macquarie Street and Barrack Lane, alternative construction methods would be investigated and considered for works in the location of the town drain in George Street in order to retain this section of the drain where feasible.	N/A	N/A	The Town Drain would not be affected by the SOM works therefore HE-8 is not applicable
HE-13	<p>A moveable heritage item strategy would be prepared by a suitably qualified heritage consultant and include a comprehensive record of all moveable heritage. The moveable heritage item strategy would form part of a broader interpretation strategy for the project and would include the following items:</p> <ul style="list-style-type: none"> ○ Cumberland District Hospital Precinct. ○ Royal Oak Hotel and stables ○ Dundas Railway Station Group 	N/A	N/A	A moveable heritage strategy for the PLR route would have been completed by Package 4 contractors. No impacts to significant fabric requiring movement of heritage items would be undertaken as part of the SOM works. This REMMM would not apply to SOM works.

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-14	<p>Prior to the commencement of construction, photographic archival recording and reporting 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>The record would be prepared by a suitably qualified heritage consultant using archival-quality material. Records for State Heritage Register (SHR) listed items would be held at the NSW Heritage Council, the State Library and the owner of the asset. Records for locally-listed items would be held by the local council, the local library/studies and the owner of the asset.</p> <p>Specific items subject to archival recording would be documented as part of the heritage management plan and would include:</p> <ul style="list-style-type: none"> • Cumberland District Hospital Precinct. • St Patrick's Roman Catholic Cemetery • Royal Oak Hotel and Stables • Alfred Square (and potential archaeological site) • Ancient Aboriginal and Early Colonial Landscape (Robin Thomas Reserve) • Camellia Underbridge Abutments (south and north) • Dundas Railway Station Group. 	N/A	N/A	All archival recording of the PLR route would have been completed by Package 4 contractors prior to commencement of SOM works. This REMMM would not apply to SOM works and is listed as not applicable in the staging report.

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-15	<p>Prior to total or partial demolition of heritage items or elements located within the boundaries of a heritage item, heritage fabric would be identified for salvage and reuse opportunities considered. Components of high and exceptional significance recommended for conservation and reuse would be listed within a salvage schedule to be incorporated within a Salvage Scheme for the project. The scheme would indicate appropriate storage locations as well as appropriate types of buildings and structures where the salvaged elements may be reused. This would apply to the following items:</p> <ul style="list-style-type: none"> • Cumberland District Hospital Precinct. • Stone kerbing and trees (I362). • Stone kerb and gutter (I353). • Stone kerb and gutter (I329). • Camellia Underbridge Abutments (south and north). • Dundas Railway Station Group (platforms). 	N/A	N/A	A salvage strategy for the PLR route would have been completed by Package 4 contractors. No impacts to significant fabric would be undertaken as part of the SOM works. This REMMM would not apply to SOM works.

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-16	<p>For State Heritage Register items, existing Conservation Management Plans (CMPs) would inform the design and construction methodology in that area. Where impacts to SHR items would modify the item or impact significant elements, updated CMPs would be prepared which would include recommendations on amendments to curtilage. This would apply to the following items:</p> <ul style="list-style-type: none"> • Cumberland District Hospital Precinct • St Patrick's Roman Catholic Cemetery • Alfred Square (and potential archaeological site) • Lennox Bridge • Ancient Aboriginal and Early Colonial • Landscape (Robin Thomas Reserve) • Sewage Pumping Station 67 • Rydalmere Hospital Precinct (former) • Dundas Railway Station Group. 	N/A	N/A	SOM works would be within the existing construction corridor prepared by Package 4.

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-17	<p>During detailed design and construction planning, opportunities to reduce direct impacts on trees where they contribute to the heritage character of a location would be investigated in accordance with the tree mitigation and management measures, including trees and plantings associated with the following heritage items:</p> <ul style="list-style-type: none"> • Cumberland District Hospital Precinct. • Street trees along O’Connell Street that form part of heritage item (I362). • St Patrick’s Roman Catholic Cemetery. • Alfred Square (and potential archaeological site). • Ancient Aboriginal and Early Colonial Landscape (Robin Thomas Reserve). • Queen’s Wharf Reserve and stone wall and potential archaeological site. • Wetlands. • Trees in median strip. 	N/A	N/A	No significant trees would be impacted by the SOM works, therefore this REMMM is not applicable.
HE-18	<p>During detailed design and construction planning, opportunities to appropriately reuse the Camellia underbridge abutments would be explored in consultation with a heritage architect.</p>	N/A	N/A	The Camelia underbridge would not be impacted by SOM works. This condition is applicable to Package 4 and is not applicable to SOM works as stated in the staging report.

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-19	During detailed design and construction planning, opportunities to reduce impacts on Dundas Railway Station Group would be explored including improving the interface design between the proposed light rail infrastructure and the existing heritage infrastructure, including the potential adaptive reuse of original heritage infrastructure as part of the light rail stop. Any adaptive reuse would be developed in consultation with a heritage architect.	Prior to project works		During construction exclusion zones would be provided around significant fabric with 10m of works that is not approved for impact.
HE-21	<p>An Aboriginal and non-Aboriginal Management Plan would be prepared as described in AB-2.</p> <p>In addition, archaeological monitoring of construction excavation activities would be carried out by a qualified archaeologist based on the archaeological research design to record any significant remains uncovered by excavation (in accordance with HE-3). Examples of where archaeological monitoring may be required include:</p> <ul style="list-style-type: none"> » Low impact construction activities (such as narrow trenching) in areas of moderate to high potential for local or State significant relics. » Areas with low potential to contain remains of State significance. 	Prior to project works	This plan	<p>This plan meets the requirement for an Aboriginal and non-Aboriginal Management Plan.</p> <p>It is noted all archaeological clearance works would be undertaken by Package 4 contractors prior to SOM works being undertaken.</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
HE-22	The method for the construction methodology (including the for demolition of existing buildings and/or structures) would be developed to minimise direct and indirect impacts on adjacent and/or adjoining heritage items. This would include consideration of potential (including vibration related impacts), where identified in accordance with the Construction Noise and Vibration Management Plan.	Prior to project works	Noise and Vibration Management Plan.	The noise and vibration assessment has been used to determine appropriate equipment selection to minimise potential vibration impacts. Therefore, no vibration intensive plant would be used for the SOM works, and no vibration monitoring is required.
HE-23	In relation to HAMU 31 – Grave of Elinor Magee and Child, the grave site would be identified in the Environmental Control Maps and protected and avoided during construction works.	N/A	N/A	Subsurface works would not occur within HAMU 31 as part of SOM works therefore this REMMM is not applicable.
AB-1	Aboriginal heritage interpretation would be incorporated into the design of the project in consultation with registered Aboriginal stakeholders.	Prior to project works	Heritage Interpretation Plan	Aboriginal heritage would be incorporated into the Heritage Interpretation Plan prepared by SOM for the works.

REMMM	Requirement	Timing	HMP Reference	How Addressed
AB-2	<p>An Aboriginal and non-Aboriginal heritage management plan would be prepared as part of the CEMP. Specific measures would be identified in consultation with NSW Office of Environment and Heritage (OEH) and other relevant government agencies. As relevant, the plan would be developed in consultation with Registered Aboriginal Parties.</p> <p>The objectives and strategies of the plan would include the following:</p> <ul style="list-style-type: none"> » Minimise impacts on items or places of heritage value. » Procedures for carrying out salvage or excavation of heritage relics or sites (where relevant) and any recordings of heritage relics prior to works commencing that would impact the heritage relic or site. » Procedures for interpretation of heritage values uncovered during salvage or excavation during detailed design. 	Prior to project works	Section 7 HE 16; HE 17	<p>Archaeological clearance of Aboriginal sites would have been undertaken during Package 4 works therefore no Aboriginal archaeological management would be required as a result of the SOM works. RAPs have therefore not reviewed this plan but will be provided with the plan for information.</p> <p>Non-Aboriginal heritage impact are not expected, as outlined in this plan.</p> <p>If an unexpected find was located the TfNSW Unexpected Heritage Finds Guidelines would be implemented together with the GRCLR E65 Procedure (Appendix A2).</p> <p>The nominated archaeologist would provide advice on archaeological; management in accordance with this plan and the ACHAR for the project</p> <p>Where relics were to be impacted E65 would be implemented which would involve consultation with the NSW Heritage Council or delegate).</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
AB-3	<p>Archaeological salvage excavation (in accordance with the methodology detailed in Technical Paper 4 – Parramatta Light Rail: Aboriginal Cultural Heritage Assessment) would be carried out for the following sites prior to the commencement of construction:</p> <ul style="list-style-type: none"> • Cumberland Hospital East. • Harris Street Footpath/Robin Thomas Reserve. • PLR AFT 2 (formerly PLR PAD 2). • Sydney Turf Club car park. 	N/A	N/A	The Aboriginal sites included in AB-3 would not be impacted by the SOM works as subsurface works would not be undertaken in this location. The site locations would be included on the ECMs. Staging report states AB-3 is only applicable if excavation works required in areas not previously salvaged by Package 4.
AB-4	<p>Exclusion zones would be established during construction for the following partially impacted sites to protect the portion of the site located outside the project construction disturbance boundary:</p> <ul style="list-style-type: none"> • Cumberland Hospital East. • Harris Street Footpath/Robin Thomas Reserve. <p>Suitable controls would be identified in the heritage management plan and shown on the Environmental Control Maps (refer Transport for NSW Guide to Environmental Control Map), which may include barrier fencing to delineate the exclusion zones.</p>	During construction	This plan	The site locations would be included on the ECMs and exclusion fencing erected if works are to occur within 10m of the site.
NV-7	Where vibration intensive construction activities are proposed within 100 metres of sensitive receivers, these works would be confined to the less sensitive daytime period where possible. The potential impacts from vibration are to be considered in the site-specific Construction Noise and Vibration Impact Statements (to be developed during detailed design). In general,	N/A	Noise and Vibration Management Plan.	The noise and vibration assessment has been used to determine appropriate equipment selection to minimise potential vibration impacts. Therefore, no vibration intensive plant would be used for SOM

REMMM	Requirement	Timing	HMP Reference	How Addressed
	<p>mitigation and management measures that would be considered include:</p> <ul style="list-style-type: none"> • Relocate vibration generating plant and equipment to areas within the site in order to lower the vibration impacts. • Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment. • Use lower vibration generating items of excavation plant and equipment (e.g. smaller capacity rock breaker hammers). • Minimise consecutive works in the same locality (if applicable). • Use dampened rock breakers to minimise the impacts associated with rock breaking works. <p>If vibration intensive works are required within the safe working distances, vibration monitoring or attended vibration trials would be carried out to ensure that levels remain below the cosmetic damage criterion.</p> <p>Building condition surveys would be completed both prior to the commencement of construction works and following the completion of construction works to identify existing damage and any damage due to the works.</p> <p>Measurements of existing ambient vibration levels would be carried out at receivers with vibration sensitive equipment during the detailed design. This information would be used to inform the site-specific Construction</p>			<p>works and no vibration monitoring is required.</p>

REMMM	Requirement	Timing	HMP Reference	How Addressed
	Noise and Vibration Impact Statements for works near these locations.			
VL-17	<p>The footprint of construction compounds in open space areas would be minimised where feasible to reduce visual impacts. This includes the following areas:</p> <ul style="list-style-type: none"> • Westmead compound. • Parramatta North Compound. • Parramatta River Bridge (north). 	Prior to and during works	This plan Section 8.2 listed compound locations	H9 requires that the extent of the compound site would be minimised as practicable.

6 Environmental Performance Outcomes

Table 6-1: EPOs relevant to the CEMP

EPO	Requirement	Reference	How Addressed
EPO-HE-2	The project would be sympathetic to heritage items and, where feasible and reasonable, avoid and minimise impacts to non-Aboriginal heritage items and archaeology.	H2, H3, Appendix A	Where SOM works are within heritage curtilages works would be within the Package 4 corridor therefore additional impacts would not occur. Exclusion zones will be documented on EWMSs and ECMs. This has been included as a mitigation measure H2. Any unexpected heritage items will be appropriately managed using the TfNSW Unexpected Heritage Finds Guideline.
EPO-AB-1	The project would be sympathetic to heritage items and, where feasible and reasonable, avoid and minimise impacts on Aboriginal heritage items and archaeology.	H2, H3, Appendix A	Aboriginal objects will not be destroyed, modified or physically affected, unless authorised by the Planning Approval. Exclusion zones will be documented on EWMSs and ECMs. This has been included as a mitigation measure H2. Any unexpected heritage items will be appropriately managed using the TfNSW Unexpected Heritage Finds Guideline.
EPO-AB-2	Appropriate Aboriginal heritage interpretation would be incorporated into the design of the project in consultation with registered Aboriginal stakeholders.	H6	Any information on Aboriginal objects discovered would be input into Heritage Interpretation Strategy and SOM Heritage Interpretation Plan for the construction program.

7 Consultation

This section describes consultation that has been undertaken in preparation of this Plan.

7.1 Consultation undertaken to date

Consultation has been carried out to develop project options, the concept and detailed design, and to prepare the EIS, submissions report and modification application.

Consultation and collaboration with Registered Aboriginal stakeholders has been integral to the assessment and management of Aboriginal cultural heritage for the project. As no Aboriginal objects would be harmed by the SOM works, it is expected that Aboriginal consultation would be limited to review of this plan.

Consultation is outlined in the EIS in Chapter 4.

7.2 Consultation Requirements under the Infrastructure Approval

CoA C3(d) requires that the HMP is prepared in consultation with the Heritage DPC and CoPC, while REMMM AB-2 commits to identifying specific management measures in consultation with Heritage DPC and relevant Government agencies (taken to be OEH and CoPC).

This sub plan has been developed in consultation with relevant stakeholders as identified above. The outcomes of the consultation are addressed and documented in a separate standalone Consultation Report, submitted to DPE together with the this HMP.

Consultation was undertaken with listed Stakeholders between 23 July and 4 September 2020, with no issues raised by any of the stakeholders. Full details of the consultation undertaken is contained in the stand along A5 Consultation Report PLR1SOM-GLR-ALL-EN-RPT-001010 Revision B, submitted together with this CHMP to DPE.

In accordance with COA C8 construction will not commence until this Subplan has been submitted to and approved by the Planning Secretary for DPE.

7.3 Registered Aboriginal Party Consultation

Consultation with Registered Aboriginal Parties (RAPs) was undertaken during concept design as part of the Parramatta Light Rail Stage 1 Environmental Impact Statement (EIS) and preparation of the ACHAR. The list of RAPs as compiled during the EIS assessment phase is as below.

Table 7-1: List of Registered Aboriginal Parties

Registered Aboriginal Stakeholder	Representative and/or Contact Person
Deerubbin Local Aboriginal Land Council	CEO
A1 Indigenous Services	Carolyn Hickey
Aboriginal Archaeology Service Inc.	Andrew Williams
Amanda Hickey Cultural Services	Amanda Hickey
Badu	Karia Bond

Registered Aboriginal Stakeholder	Representative and/or Contact Person
Biamanga	Seli Storer
Bidawal	Stella Brierley
Bilinga	Simalene Carriage
Cullendulla	Corey Smith
Darren John Duncan	Darren John Duncan
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham
Darug Aboriginal LandCare	Des Dyer
Darug Land Observations	Jamie Workman
Dharug	Andrew Bond
Didge Ngunawal Clan	Lilly Carroll and Paul Boyd
Djiringanj	Keith Nye
Elouera	Lenard Nye
Eora	Kahu Brennan
Gangangarra	Kim Carriage
Goobah	Basil Smith
Gulaga	Wendy Smith
Gundungurra Tribal Technical Services	Chris Payne
Gunjeewong Cultural Heritage Aboriginal Corporation	Cherie Turrise (Carroll)
Kamilaroi-Yankuntjatjara Working Group	Phil Khan
Kuringgai	Toni Brierley
Muragadi Heritage Indigenous Corporation	Jesse Johnson (Carroll)
Murra Bidgee Mullangari	Darleen Johnson
Murramarang	Roxanne Smith
Murrumbul	Steven McCarron
Ngarigo	Newton Bond
Ngunawal	Mitchell Freeman

Registered Aboriginal Stakeholder	Representative and/or Contact Person
Nundagurri	Newton Carriage
City of Parramatta Council Aboriginal and Torres Strait Islander Advisory Committee	Maggie Kyle
Rane Contracting	Tony Williams
Tharawal	Violet Carriage
Thauaira	Shane Carriage
Tocomwall	Danny Franks
Walbunja	Hika Tekowhai
Walgula	Ronald Stewart
Wandanian	William Bond
Widescope Indigenous Group	Steven Hickey
Wingikara	Izahya Henry
Yerramurra	Owen Carriage Jr
Registered Aboriginal Stakeholder [details withheld]*	Registered Aboriginal Stakeholder [details withheld]*

**one additional Aboriginal stakeholder has registered for the project but has chosen to withhold their details in accordance with item 4.1.5 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH 2010b).*

Aboriginal community consultation has been guided by OEH 'Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation'¹, using the OEH 'Aboriginal cultural heritage consultation requirements for proponents'² as best practice.

A consultation log will be maintained for the project to detail any correspondence or ongoing consultation undertaken with the RAPs.

RAPs would also be notified in the event of an unexpected find of an Aboriginal object, or human remains that may be Aboriginal.

¹ Department of Environment and Conservation 2005

² Department of Environment, Climate Change and Water 2010

8 Environmental Aspects and Impacts

This section outlines impacts of the SOM works to heritage items where they are over and above that undertaken by the previous packages of works. SOM construction would primarily occur in areas where Package 4 works have been completed and impacts to heritage items have already taken place.

The works which are the subject of this plan are:

- Seven traction power stations
- Four site compounds
- Sixteen tram stops (above ground works)
- Five Tetra masts
- Back up Operational Control Centre (BOCC)

8.1 Traction power substations

Seven traction power substations (TPS) would be provided across the PLR route at the following locations.

1. TPS 1 Westmead
2. TPS 2 North Parramatta
3. TPS 3 Parramatta CBD
4. TPS 4 Camellia Junction
5. TPS 6 Telopea
6. TPS 7 Carlingford
7. TPS 8 Camellia SaM Facility

All excavation would be within existing conduits or areas that have been subject to disturbance from Package 4 works or at the SaMF site. No impacts to significant archaeological remains are expected as a result of these works which would be managed under the unexcepted find policy.

8.2 Site compounds

Four separate compounds will be established along the project alignment by GRCLR to provide an area for establishment of facilities and amenities for construction staff. The compounds are located so as to service delivery operations within a designated portion of the route. Details as follows:

1. Cumberland Hospital Base (incl. Stops 1-6), servicing corridor works from Westmead to Riverside Theatres.
2. O'Connell St Base (Incl. Stops 6-10), servicing corridor works from Riverside Theatres to Robin Reserve.
3. Sam Facility (incl. Stops 11-12), servicing works at the SaMF as well as corridor works from Robin Reserve to North of Parramatta River.
4. Adderton Rd Base (incl. Stops 13-16), servicing corridor works from North of Parramatta River to Carlingford.

There would be no subsurface works within the site compound locations therefore no archaeological management would be required. Any visual impacts would be temporary.

8.3 Tram stops

Sixteen tram stops would be constructed across the route. All stops would be constructed on the track slab which would be provided by Package 4 contractors so additional management would not be required by the SOM contractor.

The nominated heritage consultant would advise on minimising impacts during detailed design. The tram stops would also be included in the Heritage Interpretation Plan which would discuss implementation of the Heritage Interpretation Strategy in the context of SOM works.

8.4 Tetra masts

The proposed works involve the installation of the Tetra communication masts as part of the communications system along the PLR line. In total there are six sites which require a mast and cabinet to support the communications system. Tetra communication masts would be installed at the following locations:

- Off Calder Road, Rydalmere, immediately south of Dundas Railway Station (BOCC)
- Ashley Lane, Westmead (TSP1)
- Corner of Factory Street and Galloway Street, North Parramatta (TSP2)
- Macquarie Street, Parramatta (TSP3)
- Lloyds Avenue, Carlingford (TSP 7)
- Colqhoun Street, Roseville (TSP8)

The BOCC Tetra mast to be installed at Rydalmere, near Dundas Railway Station, would replace an existing mast and would be approximately 25m in height, the same height as the existing mast. At each site, it is assumed that the works would involve the following:

- Install a concrete pad footing for the Telstra Radio Cabinet and mast, with below ground excavation of up to 400mm
- Installation of the mast on the new pad footing.

It was found that the proposed works would occur within the curtilages of one heritage item, although impacts to that item have been assessed as negligible³:

- Carlingford Stock Feeds (Carlingford Produce Store), listed on The Hills LEP 2012 (I46) and RailCorp s170 Register. TPS7 would be located within the curtilage.

Visual impacts to heritage items adjacent to mast locations would vary from neutral to negligible. The proposed works are not expected to impact any significant archaeological remains as archaeological clearance of the area would have been completed previously. The proposed works would not result in heritage impacts higher than negligible.

³ Tetra Towers heritage assessment, 30th March. Artefact memo to SOM contractor

8.5 Back Up Operational Control Centre

The BOCC will be located near Dundas Station and will provide additional satellite facilities whilst LORAC are undertaking delivery works. The building structure will be flat roofed with a footprint of 6 x 12 m. The works would include provision of three car parking spaces. The BOCC site is previously cleared and disturbed, as the site of a Sydney Trains maintenance yard, adjacent to the public open space of Winjoy Reserve, an at-grade commuter carpark and the rail line.

The nearest heritage site is Dundas Railway Station group (Dundas Station) which is listed on the State Heritage Register (1133), RailCorp s170 Heritage and Conservation Register and Parramatta LEP 2011 (I01133). The site of the BOCC is outside of the heritage curtilage of Dundas Station. The works are proposed in an area the EIS concluded it is unlikely that earthworks along the T6 Carlingford Line would impact on archaeological remains (HAMU34)

9 Management Measures

Table 9-9-1: Heritage management and mitigation measures

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
H1	Implementation of CHMP	Construction	GRCLR Environmental and Sustainability Manager		CoA: C3(d) REMMM: AB-2, HE-21
H2	No Aboriginal or Non-Aboriginal heritage items outside the Project footprint or uncovered during construction may be destroyed or otherwise physically affected.	Construction	GRCLR and Subcontractors	<p>The Unexpected Heritage Finds Guideline (TfNSW, 2015) requires that work cease in the vicinity of the find while the find is assessed, consultation occurs and management measures are confirmed.</p> <p>Exclusion zones would be provided for Aboriginal or Non-Aboriginal heritage items (significant fabric) within 10m of work.</p> <p>Tool box talks and inductions would be undertaken to provide information on nature and location of heritage items.</p>	CoA: E60, E76 REMMM: AB-2
H3	Unexpected finds would be managed under the Unexpected Heritage Finds Guideline (TfNSW, 2015) (Appendix A)	Pre-Construction Construction	GRCLR and Subcontractors	The Unexpected Heritage Finds Guideline (TfNSW, 2015) would be applicable. This guideline has been confirmed as appropriate by a suitably qualified heritage	CoA: E61, E62, E63, E77 REMMM: AB-2

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
				consultant/Excavation Director as per appendix A	
H4	Additional construction works outside the project area	Construction	GRCLR Environmental and Sustainability Manager	Where works is required outside the project area, a consistency assessment must be prepared which would assess any potential heritage impacts. Any future revision of this Plan relating to changes in management measures or impacts must be referred to the Heritage DPC for review.	Good practice CEMP Section 9
H5	Heritage inductions	Pre-construction Construction	Project Manager	All personnel including sub-contractors working on site will undergo induction training relating to heritage management issues before starting work. Heritage concerns will be raised and discussed at regular toolbox-talks.	Good practice CEMP Section 5
H6	Any Aboriginal objects discovered will be identified in a heritage interpretation strategy.	If Aboriginal objects are uncovered	GRCLR Environmental and Sustainability Manager	No Aboriginal sites or areas of Aboriginal archaeological potential are located within the project area. If any Aboriginal objects are discovered during works they will be added to the Package 4 Heritage Interpretation Strategy through liaison with the TfNSW project team. The strategy will be updated within 6 months to update any additional finds.	REMMM: AB-1

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
H7	Notification of a relic	Pre-construction Construction	GRCLR Environmental and Sustainability Manager	<p>If relics are identified Heritage DPC as a delegate of the NSW Heritage Council must be notified in accordance with s146 of the NSW Heritage Act, which is not switched off by the CSSI approval. The TfNSW Unexpected Heritage Finds Guidelines should be followed in regard to notification of a relic.</p> <p>If an unexpected archaeological find of local or State significance was identified E65 would be triggered and consultation with the Heritage Council (or its delegate) would be required in order to demonstrate minimisation of impacts.</p>	CoA: E73, E65 s146 of the NSW Heritage Act
H8	Excavation Director involvement	Construction, specifically excavation	GRCLR Environmental and Sustainability Manager	Where the TfNSW Unexpected Heritage Find Guideline is triggered the Excavation Director must oversee its implementation during excavation. Where relics are discovered the GRCLR E65 Procedure (Appendix A2) would be implemented and an Archaeological Excavation Report would be prepared.	CoA: E74, E75 REMMM: HE 1-7,- 21
H9	Compound site location and use	During construction	GRCLR Environmental and Sustainability Manager	In accordance with VL-17 the extent of compound sites must be minimised and location chosen in order to reduce visual impacts to the heritage item.	REMMM VL-17

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
				<p>Subsurface impacts would not be undertaken at compound sites as existing premises would be used.</p> <p>Site compounds must be installed as per the Environmental Control Maps and Section 4.3.4 of the CEMP.</p>	
H10	Heritage Interpretation Plan	Pre-construction	GRCLR Environmental and Sustainability Manager	A Heritage Interpretation Implementation Plan would be prepared to outline implementation of the Package 4 Heritage Interpretation Strategy for SOM works including the tram stops.	CoA: E64, E79
H11	Advice on acoustic treatment	Construction	GRCLR Environmental and Sustainability Manager	Where the ONVR prepared in accordance with E48 identifies acoustic treatment to a heritage item, the nominated heritage consultant would provide advice on minimising and mitigating impacts.	CoA: E69
H12	Registration of Aboriginal sites	Construction	GRCLR Environmental and Sustainability Manager	<p>Any Aboriginal objects discovered must be registered on the OEH's Aboriginal Heritage Information Management System (AHIMS) register.</p> <p>The TfNSW Unexpected Heritage Finds Guidelines should be followed in regard to registration of an Aboriginal site.</p>	CoA: E79

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
H13	Exclusion zones for Aboriginal sites	Construction	GRCLR Environmental and Sustainability Manager	The Aboriginal site locations would be included on the ECMs and exclusion fencing erected if works are to occur within 10m of the site	CoA: AB-4
H14	Exclusion zones at Dundas Station	Construction	GRCLR Environmental and Sustainability Manager	During construction exclusion zones would be provided around significant fabric with 10m of works that is not approved for impact.	REMM: HE-19
H15	Archaeological management of an unexpected find (relic)	Construction	GRCLR Environmental and Sustainability Manager Excavation Director	If an unexpected find is located during works the TfNSW Unexpected Heritage Finds Guideline would be implemented together with the GRCLR E65 Procedure (Appendix A2). The Excavation Director would advise on appropriate archaeological management.	REMM: AB-2
H16	Archaeological management of an unexpected find (Aboriginal object)	Construction	GRCLR Environmental and Sustainability Manager	If an unexpected Aboriginal object is located during works the TfNSW Unexpected Heritage Finds Guideline would be implemented together with the GRCLR E65 Procedure (Appendix A2). The nominated archaeologist with expertise in Aboriginal archaeology would advise on appropriate archaeological management in accordance with the ACHAR.	REMM: AB-2
H17	Archaeological management of new areas	Construction	GRCLR Environmental and Sustainability Manager	If TfNSW formally directs SOM to undertake additional works that would require subsurface works in areas not currently in	CoA: E75, E75

ID	Management Action	Trigger/timing	Responsibility	Description of Management Action	Relevant REMMM/CoA or document
			Sustainability Manager	SOM scope, and those areas may have archaeological potential, the nominated archaeologist would advise on whether an archaeological research design is required to outline the appropriate archaeological management. N.B. If those new and additional works are also outside the bounds of the CSSI approval, TfNSW will need to provide the appropriate approvals prior to any ARD or subsurface works commence.	
H18	Minimisation of visual impacts	Construction	GRCLR Environmental and Sustainability Manager	SOM would maintain a tidy workplace and ensure that the temporary project footprint be minimised to mitigate impacts to heritage and the visual setting. Lighting would be minimised and hoarding design would be in line with TfNSW guidelines and standards for the PLR Project.	CoA: E80

10 Compliance Management

This section describes how compliance will be achieved and identifies the responsible parties for all requirements.

10.1 Roles and responsibilities

The Contractor's organisational structure and overall roles and responsibilities are outlined in Section 3.2 of the CEMP. Section 9 of this document describes specific responsibilities pertinent to this Plan.

Artefact Heritage is the engaged advisor to the SOM works.

10.2 Training

All personnel including sub-contractors working on site will undergo induction training relating to heritage management issues before starting work. The induction training will address elements related to heritage management including:

- Existence and requirements of this Plan
- Relevant legislation
- Roles and responsibilities for heritage management
- Location of identified heritage sites and no-go areas
- Proposed heritage management and protection measures
- Procedure to follow in the event of an unexpected heritage find or discovery of human remains.

Section 4.2 of the CEMP provides further details regarding staff induction and training.

10.3 Monitoring and inspections

Regular monitoring of works will be undertaken as described in Section 8 of the CEMP. This monitoring will include heritage observations such as checking works remain in the project boundary.

10.4 Auditing

Auditing to assess the effectiveness of environmental controls and compliance with this Plan, CoA, REMMMs, Contractor requirements, and other relevant approvals, licenses and guidelines will be carried out in accordance with the auditing scheduled described in Section 8 of the CEMP.

10.5 Reporting

In accordance with the CoA, REMMM, and Contractor Requirements:

- CoA E63: the TfNSW Unexpected Heritage Finds Guideline was submitted to the Secretary on 7 December 2020.
- Section 7 and 8 of the CEMP documents the additional reporting requirements and responsibilities.

10.6 Unexpected finds

Unexpected finds would generally be managed under the TfNSW Unexpected Heritage Finds Guideline (Appendix A). The TfNSW Unexpected heritage finds guideline is considered appropriate by the project archaeologists. In accordance with E62 the procedure is considered certified by Dr Sandra Wallace (PhD Archaeology), Director at Artefact.

Although the TfNSW Unexpected heritage finds guideline includes human remains as an example of an unexpected find it does not specify the required procedure for reporting the find.

In the event of identifying potential human remains during construction of the PLR SOM works the following would be undertaken in consultation with the ER:

- Stop work and secure the site
- Notify the site manager, the ER and TfNSW
- Engage a technical specialist (archaeologist or forensic anthropologist) to assess the nature of find
- Contact the NSW Police and coroner if remains are found to be human

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:

Forensic case (remains are less than 100 years old): If it is determined by specialist assessment that the remains are forensic, the remains would come under the jurisdiction of the State Coroner and the Coroners Act 2009. The NSW Police would likely secure the site and will advise on the procedure to be followed which would include involvement of the Coroner.

Archaeological – non-Aboriginal human remains (more than 100 years old).

Notification to the Heritage Division of OEH. Additional consultation and approvals would be required in order to impact remains under the CSSI. The police and coroner may still have involvement in order to confirm that they have no jurisdiction under the Corners act.

Archaeological – suspected Aboriginal human remains (more than 100 years old).

The RAPs must be present where it is reasonably suspected that Aboriginal burials or human remains have been encountered. Recording of Aboriginal ancestral remains must be undertaken by, or be conducted under the direct supervision of a specialist. The police and coroner may still have involvement in order to confirm that they have no jurisdiction under the Corners act.

Notification to OEH and the RAPs. Additional consultation and approvals would be required in order to impact remains under the CSSI.

Note that the approval does not allow impact to human remains under the CSSI.

Work will only restart once the requirements of that Guideline have been satisfied.

Where relevant, Aboriginal objects will be registered in AHIMS.

11 Review and improvement

This section describes how and when this Plan will be updated.

11.1 Continuous improvement

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. This is also discussed in Section 7.5 of the CEMP.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets. Due to the short nature of the works at all sites, The Contractor will not implement a formal continuous improvement system but will work proactively with the Environmental Representative to identify and improve environmental management across the project and address any non-compliances.

11.2 HMP update and amendment

The processes described in Chapter 9 of the CEMP may result in the need to update or revise this Plan. This will occur as needed.

Only the Contractor's Environment Manager, or delegate, has the authority to change any of the environmental management documentation. These changes must be approved by the Environmental Representative (ER) or DPE. The ER has the authority to approve minor amendments to plans in consultation with the DPE. Only DPE has the authority to approve major amendments to plans. See Section 9 in the CEMP.

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure (refer to Section 3.11.3 of the CEMP).

Appendix A1: Unexpected Find Guideline



Unexpected Heritage Finds Guideline

3TP-SD-115/2.0

Supporting Document – Applicable to Transport Projects
Delivery Office

Quality Management System

Status:	Approved
Version:	2.0
Branch:	Planning and Environment Services
Business unit:	Environmental Management
Date of issue:	14 April 2015
Review date:	14 April 2016
Audience:	Project Delivery/External TSR
Asset classes:	<input checked="" type="checkbox"/> Heavy Rail; <input checked="" type="checkbox"/> Light Rail; <input checked="" type="checkbox"/> Multi Sites; <input checked="" type="checkbox"/> Systems; <input checked="" type="checkbox"/> Fleets
Project delivery model:	TP Project/Alliance/Novo Rail
Project type:	Not Applicable
Project lifecycle:	<input type="checkbox"/> Feasibility; <input type="checkbox"/> Scoping; <input type="checkbox"/> Definition; <input checked="" type="checkbox"/> Construction readiness; <input checked="" type="checkbox"/> Implementation; <input checked="" type="checkbox"/> Finalisation; <input type="checkbox"/> Not applicable
Process owner:	Technical Director Planning and Environment Services

Document history

Version	Date of approval	Doc. control no.	Notes
1.0	11 July 2014	3164499_5	First issue
2.0	14 April 2015	3164499	Updated to be published to TfNSW website

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1. Purpose

The purpose of this document is to provide guidance to site personnel in the event that an unexpected heritage find is encountered on a Transport Projects Delivery Office (TPO) site.

An 'unexpected heritage find' can be defined as any unanticipated archaeological discovery, that has not been previously assessed or is not covered by an existing excavation permit, and that has potential heritage value.

In New South Wales, there are strict laws to protect and manage heritage objects and relics. As a result, appropriate heritage management measures need to be implemented to minimise impacts on heritage values, ensure compliance with relevant heritage notification and other obligations, and to minimise the risk of penalties to individuals, TPO and its contractors.

2. Scope

In some instances, even when appropriate and robust cultural heritage assessments are undertaken during the environmental impact assessment process, some heritage objects or relics are not identified, and are subsequently found on a TPO site. This guideline outlines the procedure that should be followed in those circumstances.

This guideline includes references to some of the relevant legislative and regulatory requirements but is not intended to replace them. It is not intended to replace any requirements identified as part of the environmental impact assessment process

This guideline does not apply to:

- Aboriginal and non-Aboriginal cultural heritage objects or relics found during investigations undertaken to inform the environmental assessment, in accordance with relevant legislation and the [Guide for Planning and Environmental Approvals – 2TP-ST-051](#). These environmental impact assessments typically identify all heritage items before the project is implemented
- cultural heritage investigations undertaken to comply with conditions set out in any land use planning approval for a project
- archaeological investigations permitted under the *National Parks and Wildlife Act 1974* (NPW Act) or the *Heritage Act 1977* (Heritage Act).

3. Definitions

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

CEMP	Construction environmental management plan
EM	Contractor/alliance environment manager
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
EPM	TPO environment and planning manager
Heritage Act	NSW <i>Heritage Act 1977</i>
NPW Act	NSW <i>National Parks and Wildlife Act 1974</i>
NSW	New South Wales
OEH	NSW Office of Environment and Heritage

PME	Principal Manager Environmental Management
TPO	Transport Projects Delivery Office (TfNSW)
TSR	TfNSW Standard Requirement

4. Accountabilities

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

Project directors are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

Project directors who are accountable for specific projects/programs are accountable for ensuring associated contractors follow this document to the extent they are required under TSR E – Environmental Management and the contract.

Contractors are accountable for following this document, where this guideline forms a part of their contract.

5. Legislative requirements

Table 1 identifies some of the relevant legislation/regulations for the protection of heritage and the management of unexpected heritage finds in NSW. It should be noted that significant penalties exist for breaches of the listed legislation as a result of actions that relate to unauthorised impacts on heritage items. Further, it is noted that heritage that has been assessed and is being managed in accordance with an environmental impact assessment is exempt from these offences.

To avoid breaches of legislation, it is important that TPO and its contractors are aware of their legislative obligations under relevant legislation and that appropriate management measures are in place to avoid impacts on unexpected heritage items during construction. Contractors/alliances will need to ensure that they undertake their own due diligence to identify any other legislative requirements that map apply for a given project.

Table1 Legislation and guidelines for management of unexpected heritage finds

Relevant Requirement	Objectives and offences
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Requires heritage to be considered within the environmental impact assessment of projects. This guideline is based on the premise that an appropriate level of Aboriginal and non-Aboriginal cultural heritage assessment and investigations and mitigation have already been undertaken under the relevant legislation, including the EP&A Act, during the assessment and determination process. It also assumes that appropriate mitigation measures have been included in the conditions of any approval.
<i>National Parks and Wildlife Act 1974 (NPW Act)</i>	Provides for the protection and management of Aboriginal objects. An Aboriginal object is defined as: <i>'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'</i> .

Relevant Requirement	Objectives and offences
	<p>It is an offence to harm or desecrate an Aboriginal object or place. These are strict liability offences. An offence cannot be upheld where the harm or desecration was authorised by an Aboriginal heritage impact permit and the permit's conditions were not contravened.</p> <p>A person must notify the Heritage Branch of OEH if a person is aware of the location of an Aboriginal object.</p> <p>Penalties for some of the offences can include 2 years imprisonment and/or up to \$550,000 (for individuals), and a maximum penalty of \$1.1million (for corporations).</p>
<p>Heritage Act 1977</p>	<p>Provides for the care, protection and management of relics.</p> <p>A relic is defined as: <i>'any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance.'</i></p> <p>It is an offence to disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed, unless the disturbance or excavation is carried out in accordance with an excavation permit issued by the Heritage Branch of the OEH.</p> <p>A person must notify the Heritage Branch of OEH, if a person is aware or believes that they have discovered or located a relic. Penalties for offences under the Heritage Act can include 6 months imprisonment and/or up to \$1.1million.</p>

6. Unexpected heritage finds protocol

6.1. What is an unexpected heritage find?

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

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

- Aboriginal stone artefacts, shell middens, burial sites, engraved rock art, scarred trees
- remains of rail infrastructure including buildings, footings, stations, signal boxes, rail lines, bridges and culverts
- remains of other infrastructure including sandstone or brick buildings, wells, cisterns, drainage services, conduits, old kerbing and pavement, former road surfaces, timber and stone culverts, bridge footings and retaining walls
- artefact scatters including clustering of broken and complete bottles, glass, ceramics, animal bones and clay pipes
- archaeological human skeletal remains.

6.2. Managing unexpected heritage finds

In the event that an unexpected heritage find (the 'find') is encountered on a TPO site, the flowchart in Figure 1 should be followed. Table 2 indicates roles and responsibilities referred to in Figure 1.

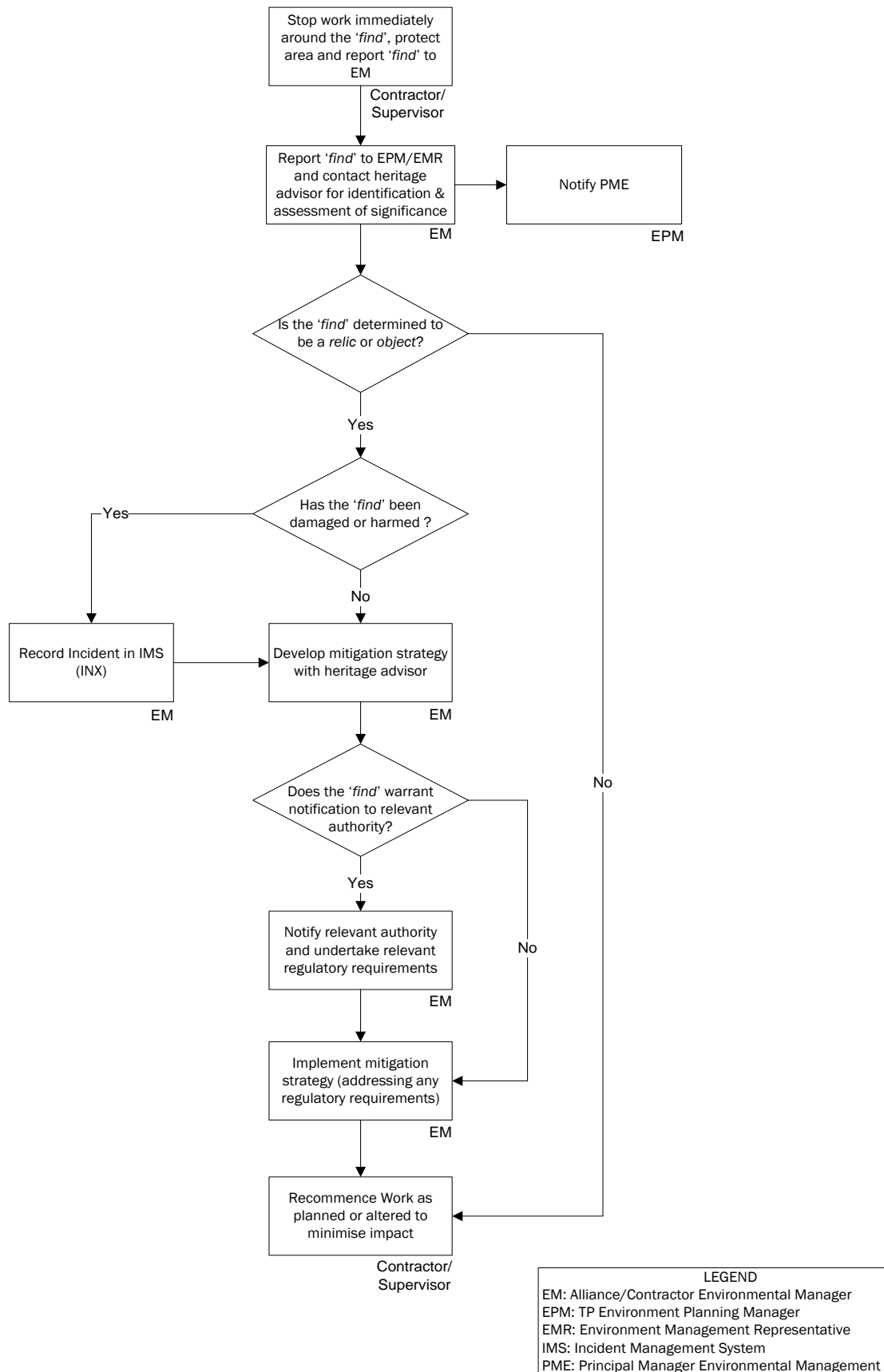


Figure 1: Unexpected heritage finds flowchart

Table 2: Roles and responsibilities within Figure 1

Abbreviation used in flowchart	Role	Responsibility or role under this Guideline
Contractor/supervisor	Contractor / supervisor	Stop work immediately when an unexpected heritage find is encountered. Cordon off area until EM advises that work can recommence.
EM	Contractor or alliance environment manager	Manage the process of identifying, protecting and mitigating impacts on the 'find'. Liaise with heritage advisor and relevant authorities on significance of the find, mitigation and regulatory requirements. Complete incident report and review CEMP for any changes required. Propose amendments to the CEMP if any changes are required. Advise Contractor / supervisor to recommence work.
Heritage advisor	Contractor's or project heritage advisor or consultant	Provide expert advice to the EM on 'find' identification, significance, mitigation, legislative procedures and regulatory requirements.
EPM	TPO environment and planning manager	Notify PME of 'find' and manage incident reporting once completed by EM.
Relevant authorities	Environment Protection and Regulation Group of OEH (for Aboriginal objects)	Regulate the care, protection and management of Aboriginal objects. Issue Aboriginal heritage impact permits.
	Heritage Branch of OEH (for relics)	Regulate the care, protection and management of relics. Issue excavation permits.

7. Related documents and references

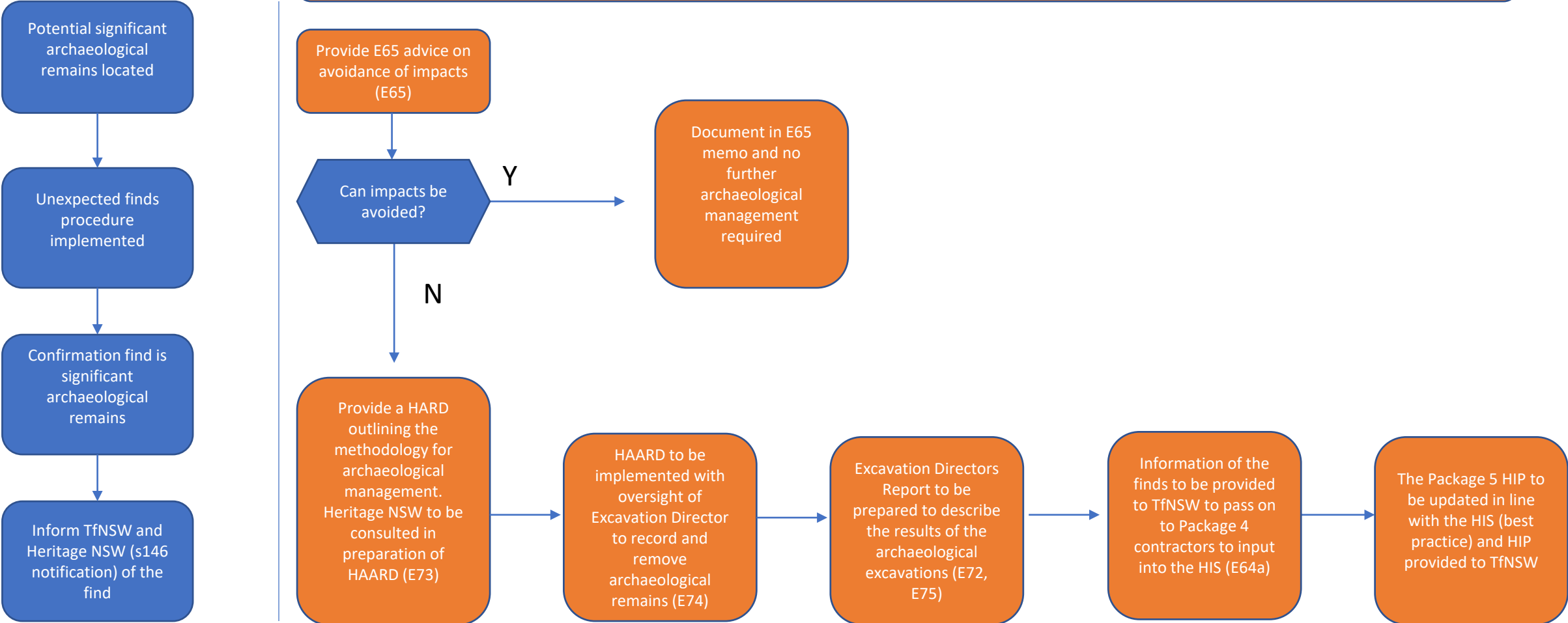
Related Documents

[Environmental Incident Classification and Reporting – 9TP-PR-105](#)
[Guide to Environmental Control Map – 3TP-SD-015](#)

Appendix A2: GRCLR E65 Procedure

Unexpected find of significant archaeological remains

Where an E65 is required



Appendix A3: Consultation Report

CoA A5 Consultation Report – Construction Heritage Management Plan

Transport for NSW

Package 5 Supply Operate and Maintain
(SOM) Works

Parramatta Light Rail

November 2023

PLR1SOM-GLR-ALL-EN-RPT-001010 Rev.D

Appendix A4: ER Endorsement

REF: AQ1148.05 PLR GLR HMP rev2 endorsement 231122

Tuesday 22nd November 2023

██████████
Senior Manager Environment
Transport for NSW
Parramatta Light Rail

Re: Parramatta Light Rail, Construction Heritage Management Plan. Supply, Operate, Maintain (SOM) Package

Pursuant to SSI8285 Condition of Approval A23 (d) ii), as the approved Environmental Representative, I confirm that I have reviewed the following updated documents for continued consistency with the requirements of the Conditions of Approval.:

- Construction Heritage Management Plan (CHMP), Supply, Operate, Maintain (SOM) Package 5 - Parramatta Light Rail (PLR1SOM-GLR-ALL-PM-PLN-000037 Rev 2), dated 8/11/2023, and
- CoA A5 Consultation Report – Construction Heritage Management Plan, Supply, Operate, Maintain (SOM) Package 5 - Parramatta Light Rail (PLR1SOM-GLR-ALL-EN-RPT-001010 Rev D), dated 21/11/2023

In my opinion the aforementioned updated documents are consistent with the requirements included in or required under the terms of the Conditions of Approval for the Parramatta Light Rail (Stage 1) development.

These documents have been updated to include the testing and commissioning scope of works associated with the SOM package.

Yours sincerely,



██████████
Environmental Representative
The APP Group

██████████
██████████ [@app.com.au](mailto:██████████@app.com.au)