

Planning Approval Environmental Review Form

SM-22-00008046

Sydney Metro – Metro Body of Knowledge (MBoK)

Assessment Name:	St Marys – Nariel Street Geotechnical Investigations
Prepared by:	Parklife Metro
Prepared for:	Sydney Metro – Western Sydney Airport, Stations, Systems, Trains, Operations and Maintenance Works (SSTOM)
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Table of Contents

Environmental Review	3
1. Proposed works and justification.....	3
2. Consistency with Conditions of Approval	5
3. Environmental review	8
4. Recommendation.....	11
5. Certification.....	11
6. Endorsement	12
Appendix A – Figures	13
Appendix B – AHIMS Search Results.....	14

Environmental Review

1. Proposed works and justification

An environmental review is applicable to design changes which are consistent with the conditions of approval and would have negligible additional impacts on the community and/or the environment. This environmental review is required to demonstrate compliance with the conditions of approval and the Sydney Metro – Western Sydney Airport (SM-WSA) Environmental Impact Statement (EIS), Submissions Report and EPBC Act Final Environmental Impact Assessment of off-airport proposed action (off-airport Final EIA). A description of activities is listed in Table 1 and an assessment provided in Section 2.

Table 1 Description of proposed works

Description	Overview
Location of works	The geotechnical works are proposed in the Nariel Street carpark on Lot 178 & 179 DP 26908 and Lot 314 & 315 DP 1282433, owned and managed by Penrith City Council. The Nariel Street carpark is located in a commercial / residential area bounded by Nariel Street to the south, West Lane to the east, Carinya Avenue to the west and a residential property at 78 Carinya Avenue to the north. The carpark is sealed with an asphalt surface. Drainage from the site is directed to the surrounding kerb and gutters to the local stormwater infrastructure which discharges to South Creek, approximately 800m west of the site. The Main Western Railway line is approximately 40m north of the carpark. The Nariel Street carpark is well utilised during weekdays with commuter and other parking. The geotechnical investigations addressed in this environmental review are located outside the approved SM-WSA Project boundary at the St Marys Station site as shown in Appendix A (Figure 1).
Scope of works	<u>Services search</u> - Electronic detection and location and ground penetrating radar (GPR) - Utilities are not anticipated in the investigation locations however if required potholing would supplement the non-intrusive service location <u>Geotechnical investigations</u> 4 x Geotechnical boreholes to be drilled - Insitu dynamic cone penetrometer (DCP) testing
Justification for works	The geotechnical report produced from the work will include advice on soil suitability and pavement design for the design and construction of the temporary bus interchange (TBI). It is noted that the relocation of the TBI will be subject to a separate consistency assessment and is not addressed further in this environmental review. Geotechnical investigations are standard works which includes insitu testing as well as subsequent laboratory analysis of the drilled core. The work is necessary to inform design development. Utility searches are required to ensure worker safety prior to intrusive works.
Timeframe for works	Works are anticipated to take 1 day and are scheduled to commence August 2026, allowing a 2 day contingency for weather.

Work hours, workforce and equipment / machinery

Works	Method	Personnel and equipment
Traffic control	-Controls instated as per Council permit and traffic guidance scheme (TGS) Work sites established with traffic controllers as per TGS	1-2 x Traffic controllers
Service investigation	-Standard survey equipment -Hand operated detection and GPR equipment	1-2 light vehicles 1 x total survey station / jigger 1 x utility search operators / GPR operator
Geotechnical borehole	-Standard method with small truck mounted drill rig (or similar) -Backfill drilling hole and temporary restoration with cold mix	As above plus 1-2 operators Drill-rig

The work would be carried out during standard work hours as set out in Condition E38 of the Conditions of Approval (CoA).

- (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
- (b) 8:00am to 1:00pm Saturdays; and
- (c) at no time on Sundays or public holidays

Out of hours works (OOHW) are not anticipated.

2. Consistency with Conditions of Approval

The following table outlines whether the proposed changes would be consistent with the relevant Conditions of Approval.

Table 2 Comparison of the proposal with relevant elements of the Approved Project

Relevant elements of the Approved Project	Proposed Change
<i>Chapter 2 of Appendix B of the Submissions Report (Project description – construction)</i> Section 2.9.1 describes the construction element required prior to main construction works. This includes • site surveys • utility investigations • geotechnical investigations including groundwater monitoring.	The geotechnical investigations are outside but adjacent to the construction footprint at St Marys as shown in Figure 1 and 2 in Appendix A. The works are required to inform design and have been described in the SM-WSA EIS as an activity required as part of the Approved Project. There is no change to the scope of work described as part of the Approved Project.
<i>Chapter 12 of the EIS (Non-Aboriginal heritage)</i> <i>Section 12.5.1 St Marys study area (Heritage items and conservation areas)</i> <i>Heritage items</i> St Marys Railway Station SHR 01249, RailCorp s170 (SHI 4801036), Penrith LEP 2010 I282 (SHI 2260282) State significance. This item includes the St Marys railway station and curtilage as well as the Goods Shed building and jib crane which are located in the forecourt plaza south of the existing heavy rail train station. The overall impact of the project as assessed in the EIS on the significance of the item was assessed as moderate <i>Potential Heritage items</i> Marys Post-war Commercial Building St Marys Munitions Workers Housing Overall impact on the significance of both these items was assessed as negligible.	There is no direct or indirect impact to any recorded heritage item from the proposed utility works. Due to the extent of disturbance in the carpark from existing earthworks, infrastructure and utilities unknown non-Aboriginal heritage items or archaeology are highly unlikely to be in the vicinity of the work areas. The Unexpected Heritage Finds Procedure would be implemented during work. The works would have no impact on heritage items (including areas of archaeological sensitivity), beyond the impacts assessed in the Approved Project.

<i>Chapter 13 of the EIS (Aboriginal heritage) and Revised Aboriginal Cultural Heritage Assessment Report</i> At the St Marys construction site, the following potential impacts were described • There are no registered AHIMS sites within the curtilage of the St Marys construction site. There are no AHIMS sites within 200 metres of the construction site • Based on the high levels of past disturbance in this construction site (including road corridors, rail corridor, the existing St Marys Station, buildings and services), no areas of archaeological sensitivity have been identified within its bounds • There are no known Aboriginal cultural values specifically associated with this construction site. • No potential direct impacts to Aboriginal archaeological sites have been identified in this construction site. No specific cultural values have yet been identified in this construction zone.	A search of the Aboriginal Heritage Information Management Sydney (search date 15/07/26) confirmed no new sites in the vicinity of the work areas. See Appendix B for search results. The geotechnical investigation locations are within a carpark adjacent to the rail corridor. The site is highly disturbed from pavement work and utilities. The extent of disturbance and prior investigation in the vicinity indicates a very low probability of unknown Aboriginal objects occurring in the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.
CSSI CoA E2 – Minimising clearing of native vegetation	No clearing of vegetation would be required and no areas of remnant vegetation remain within work areas.
CSSI CoA E36 – The Unexpected Heritage Finds and Human Remains Procedure must be implemented	The proposed works will be subject to the Sydney Metro Unexpected Heritage Finds and Human Remains Procedure.
CSSI CoA E38 Construction Hours Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays.	The geotechnical investigations will be undertaken during standard construction hours, in accordance with this condition.
CSSI CoA If damage to roads occurs as a result of the construction of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	A dilapidation report will be prepared for the carpark prior to commencement of investigations. The drilling holes will be backfilled and the work areas will be restored in agreement with Penrith City Council.
CSSI CoA E109 Construction Parking and Access Management Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive use (s); (d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and	All work will be carried out in accordance with the approved TGS. All works will comply with the approved permit issued by PCC. No idling, queuing or marshalling of vehicles will be required. Spoil haulage is not applicable to these works. Pedestrian access will be managed by the traffic controller on site.

(e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	
CSSI CoA E110 – Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	The geotechnical work will require the temporary occupation of 16 parking spaces in the Nariel Street carpark. These temporary work areas will be fenced off to create a safe position for the drill rig that is separated from car movements in the carpark and to prevent pedestrian access to the work area. Access to the remaining carpark spaces will be maintained. All work will be in accordance with the approved TGS and permit issued by Penrith City Council
CSSI CoA E115 – Safe pedestrian and cyclist access must be maintained around the St Marys construction site during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Pedestrian and cyclist access would be addressed through the TGS for the work and would include a traffic controller on site for the duration of the work.
Revised performance outcome (Transport) Safe access to properties and businesses is maintained during construction, unless alternatives are agreed with property owners and businesses	No impact to property or business access is anticipated during the work. Access to properties along Carinya Street would be maintained. There are no impacts to business access from the work beyond the impacts assessed in the Approved Project.
Revised performance outcome (non-Aboriginal heritage) -Impacts on the State heritage significant St Marys Railway Station Group are avoided or minimised so that the overall heritage value of the item is maintained -Impacts on non-Aboriginal heritage items and archaeology are minimised or where possible avoided	There is no direct or indirect impact to any recorded heritage item from the proposed utility works. Due to the extent of disturbance in the work areas from existing roads, infrastructure and utilities unknown non-Aboriginal heritage items or archaeology are highly unlikely to be in the vicinity of the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.
Revised performance outcome (Aboriginal heritage) The heritage significance of Aboriginal objects and places are protected, conserved and/or managed in order to ensure the project does not diminish the story and cultural understanding associated with the objects and places of Aboriginal people in New South Wales	A search of the Aboriginal Heritage Information Management Sydney (search date 15/07/26) confirmed no new sites in the vicinity of the work areas. There is a very low probability of unknown Aboriginal objects occurring in the work areas. The Unexpected Heritage Finds Procedure would be implemented during work
EPBC 2020/8687	Not considered further as the works would not impact protected matters or extend into or affect Commonwealth Land.

3. Environmental review

The following table provides a risk review of the potential environmental impacts of the proposed works.

Table 3 Environmental review

Environmental review	Yes / No	Description of impacts (including consideration of safeguards required by the Approved Project)
Is the proposal to take place outside of the construction footprint of the project	Yes	Works are outside the construction footprint assessed by the Approved Project. The work is adjacent to the Approved Project boundary. Impacts would be consistent with those assessed in the EIS, are anticipated to be temporary, localised, and can be managed appropriately by the existing conditions of approval, revised environmental mitigation measures (REMMs) and performance outcomes.
Is the location of works within the existing EPL premise boundary	No	EPL no 21807 has been issued to Webuild S.P.A for the Sydney Metro Western Sydney Airport - Stations, Systems, Trains, Operations and Maintenance Package. The EPL premise boundary will be amended to incorporate any works approved under this Environmental Review.
Will the works take longer than 2 weeks to complete.	No	The works are anticipated to be completed within one day but a two day contingency has been allocated for adverse weather conditions.
Does the work require OOHW approval	No	No OOHW are anticipated for the works.
Will the works impact an EEC or threatened species	No	The clearing of EEC and impacts to threatened species are not required for the proposed works.
Will works impact on native vegetation	No	The clearing of native vegetation is not required for the proposed works.
Will the works impact on habitat trees	No	Clearing habitat trees is not required.
Will clearing of non EECs or ground disturbance be of High / moderate condition vegetation. What is the area of impact	No	Impact will be limited to the existing Nariel Street carpark only. There is no clearing or ground disturbance in areas of high or moderate value vegetation.

Will the works result in medium / high noise or vibration impacts Will noise and vibration impacts on sensitive receivers be greater than that predicted in the EIA	No	Properties surrounding Nariel Street carpark are within Noise Catchment Area (NCA) 03 as described in the SM-WSA EIS. The noise management level (NML) applied to this catchment is 47dB(A) for works within standard construction hours. NCA03 has been assessed in the SM-WSA EIS as highly noise affected during typical and worst-case construction activities. The nearest residential receiver, at 78 Carinya Avenue, is north and directly adjacent to the Nariel Street carpark. Other residential receivers on Carinya Avenue are approximately 20m to the west of the investigation areas. Commercial properties back onto West Lane to the east. The drilling rig is anticipated to exceed the NML for NCA03 at the nearest residents however this would be short-term and within the impacts assessed in the SM-WSA EIS. The works are anticipated to be undertaken during standard hours with no evening or night works currently proposed. Mitigation measures would be in accordance with the approved Noise and Vibration Management Sub Plan (SMWSASSM-PLD-1NL-PC-PLN-000024).
Will the works result in medium/ high air quality impacts	No	Possible air quality impacts include minor dust and particulates generated from plant and equipment. Mitigation measures will be implemented in accordance with the Air Quality Management Sub-Plan (SMWSASSM-PLD-1NL-PC-PLN-000028) to manage these minor air quality impacts.
Will the activity be located adjacent to or in close proximity to sensitive receivers	Yes	The works would be located adjacent to residential properties along Carinya Avenue. Sensitive receivers would be notified of the upcoming works.
Would there be additional impact from what was predicted in the EIS on an Aboriginal / Historic heritage site as a result of the works	No	There are no known Aboriginal or non-Aboriginal heritage within the works areas. Due to the highly disturbed nature of the work areas the potential for impact to any heritage site is considered negligible. The Unexpected Heritage Finds Procedure will be implemented for the works.
Are works within 10m of a watercourse	No	The proposed works are not within 10m of a watercourse.

Are works in an area of known contamination	No	The proposal is not located within any area of environmental concern identified in the planning approval phase and would not result in any change to the location of areas of environmental concern, potential contamination sources and overall risk ratings, compared to the approved project. A Remedial Action Plan (RAP) has been prepared for St Marys Station by the prior contractor for the Station Boxes and Tunnelling Works (St Marys Station Remedial Action Plan (2023) SMWSASBT-CPG-SWD-SW000-GE-RPT-040521). The RAP addresses historical contamination from a former dry cleaning business at 1-7 Queen Street. Contaminated groundwater is known in the area under the Nariel Street carpark. The geotechnical boreholes will be drilled to a maximum depth of 1.5 to 2.0m. Based on information in the RAP and ongoing groundwater level data captured as part of the monitoring the standing water level of groundwater below the Nariel Street carpark is approximately 5m below ground level. Groundwater is not expected to be intersected during work. The Contamination and Asbestos Unexpected Finds Procedure will be implemented during the construction.
Will the works result in temporary or long-term traffic impacts	Yes	Works will be within an existing carpark. During the work 16 car spaces will be fenced off to create a safe workspace for the drill rig. The works are anticipated to be completed in one day. The works will be in accordance with the approved TGS and any conditions of Penrith City Council as issued in their permit for these works. There are no anticipated long-term traffic impacts and access to properties would be maintained at all times. Traffic controllers will be onsite for the duration of the work to manage car traffic and pedestrians. Temporary impacts would be localised and can be managed appropriately by the existing conditions of approval, REMMs and performance outcomes.
Will the works result in visual impacts to sensitive receivers	Yes	Temporary visual impacts are expected for those nearest residential receivers in the vicinity of the works while the geotechnical drill rig is working within the carpark. The works are anticipated to be completed within one day and no permanent visual impact is expected.
Will the works involve significant earthworks	No	Controls will be in place around the drill site as required to manage small volumes of drill fluid (eg coir logs). Minor drill spoil will be returned to the hole and tamped down and the area swept as needed. The works are consistent with the scope of work originally approved. No additional mitigation measures required

4. Recommendation

Based on the above assessment, and with reference to the SM-WSA EIS and Submissions Report, including the conditions of approval and associated CEMP and plans, it is recommended that:

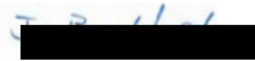


The proposed design/construction change is consistent with the Approved Project SM-WSA EIS and Submissions Report, including the conditions of approval, has negligible impacts on the community and environment and no further assessment is required.

5. Certification

The above information provides a true and fair review of the proposed works.

Prepared by (signed):



Date: 23/07/26

Name: 

Position: Parklife Metro D&C Environment Approvals Manager

6. Endorsement

I have reviewed the above review and provide the following endorsement:

✓	The proposed design/construction change is consistent with the Approved Project SM-WSA EIS and Submissions Report, has negligible impacts on the community and environment and no further assessment or modification of the planning approval is required.
	The proposed design/construction change is likely to be consistent with the Approved Project SM-WSA EIS and Submissions Report, however more than negligible impacts are expected on the community and environment and further assessment is required.
	The proposed design/construction change constitutes a project modification and requires further assessment and approval.

This endorsement is conditional on the following:

1. All works will be carried out in accordance with the Approved Project SM-WSA EIS and Submissions Report and the Project Conditions of Approval.
2. All works will be carried out in accordance with the approved Construction Environmental Management Plan and any relevant sub plans.
3. Traffic control is required on-site for the duration of work to manage carpark traffic.

Signed:	
Endorsed by:	 A/Senior Manager Planning Approvals
Date:	24.07.2026

Appendix A – Figures



Figure 1 Approved Construction Boundary (orange) and geotechnical investigation locations subject of this Environmental Review



Figure 2 Geotechnical investigations locations with carspaces required to be fenced.

Appendix B – AHIMS Search Results



AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Nariel Street Geotech

Client Service ID : 1158328

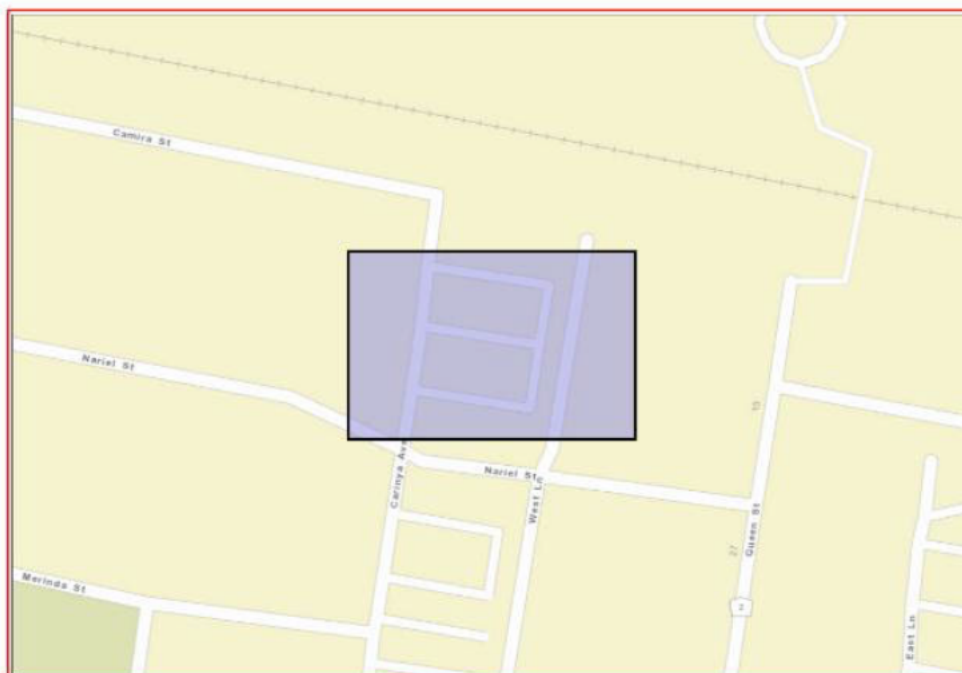
Date: 15 July 2026



Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat. Long From : -33.7627, 150.7734 - Lat. Long To : -33.7622, 150.7743, conducted by [REDACTED] on 15 July 2026.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *