

SIMTA Intermodal Terminal Facility- Stage 1

Aboriginal Heritage Impact Assessment Addendum



SIMTA

SYDNEY INTERMODAL TERMINAL ALLIANCE

Part 4, Division 4.1, State Significant Development

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Introduction

Background and Report Purpose

This addendum report has been prepared to provide further information on, and environmental assessment of, a proposed amendment to the Rail link as part of the SIMTA Stage 1 Proposal (the Proposal). This report has been prepared to support a Response to Submissions to be prepared as part of the approval process of the Proposal for State Significant Development (SSD) under Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report provides an addendum to the SIMTA Intermodal Terminal, Moorebank, NSW - Stage 1 Aboriginal Heritage Impact Assessment prepared by AHMS in May 2015, and included within the Environmental Impact Statement (dated May 2015) prepared for the Proposal.

Proposal Amendment Overview

The Rail link is to be realigned within Commonwealth Land (including MIC Site, Moorebank Avenue and the Southern Boot Land) to respond to submissions (received during the exhibition of the EIS (28 May 2015 and 26 June 2015)) and also to reduce the overall environmental impacts of the Proposal (refer to **Figure 1**).

This realignment would alter the Rail link alignment to the south of the Anzac Creek Crossing, at the intersection with Moorebank Avenue and also on the MIC site (to the immediate west of Moorebank Avenue). The rail alignment would retain the 20 metre width of the Rail Link Corridor within environmentally sensitive areas, as per the Concept Plan Approval (MP 10_0193) and the EIS.

There would be no alteration to the Rail link to north of this realignment including at the crossing of Anzac Creek, connection to, or within the Stage 1 site. There would also be no alteration to the Rail link to the west along the MIC site, the Georges River bridge crossing, within the Glenfield Waste Facility or at the southern and northern connections to the SSFL.

This alteration in the rail alignment would result in Moorebank Avenue being intersected by Rail link further north of that previously identified within the EIS. An alteration would be undertaken to the existing Moorebank Avenue road embankment to create an overbridge to accommodate the realigned Rail link.

The Rail link realignment would not generally alter the construction methodology (with the exception of the Moorebank Avenue overbridge) or the operation of the IMT as previously provided, with no change to the rail traffic, road access, operational hours, workforce or overall operational procedures.

Authors and Acknowledgments

This addendum report was written by Alan Williams, B.Sc., M.Sc., MAACAI (Senior Archaeologist). Susan McIntyre-Tamwoy (Assoc. Director) reviewed and edited a final draft of the report.

AHMS would like to thank Westley Owers and Shannon Blackmore (Hyder Consulting) for their support and assistance throughout the project.

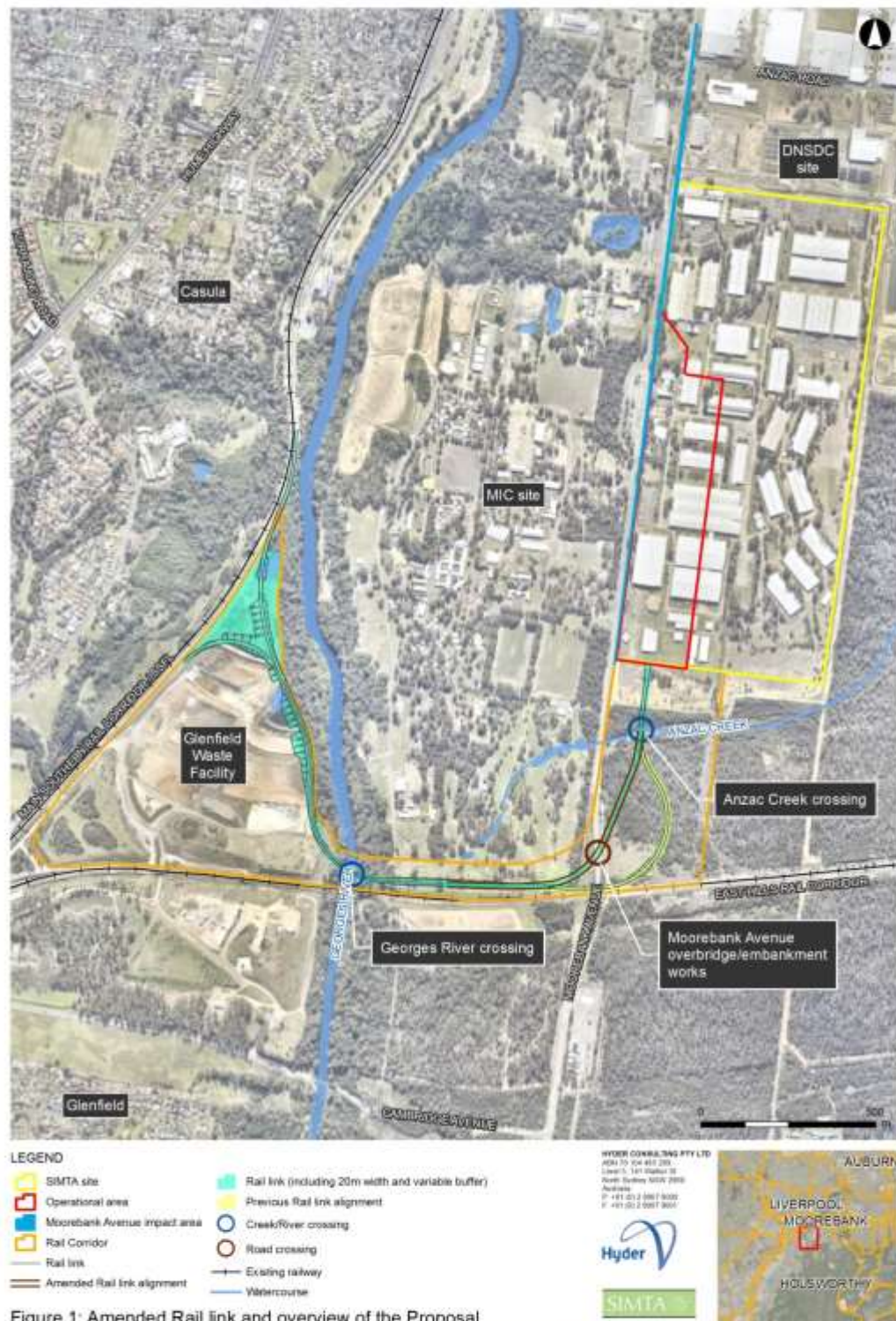


Figure 1. The original and amended rail link as part of the Stage 1 Proposal.

Aboriginal Consultation

This addendum was distributed to the registered Aboriginal parties on the 27 August 2015, and a period of 14 days provided for review and comment. No comments or feedback was received.

Archaeological Background

The Rail link has been subject to two previous investigations as part of the assessment process for the Proposal.

In 2012, AHMS undertook an Aboriginal Cultural Heritage Assessment as part of the Concept Approval for the Proposal. Since the detailed design of the Proposal was yet to be determined, the report investigated a broader area than more recent assessments. This included a review of the bushland to the south of the SIMTA site (known as the Southern Boot Land) and within the location of the alignment of amended Rail link. The assessment identified that much of the area was relatively undisturbed bushland, and had received limited archaeological investigation previously. However, it did identify that a large part of the amended Rail Link has been previously disturbed by the construction of the East Hills Passenger Railway Line, most evident in two aerial photographs from the 1986 and 1994 (**Figures 2 and 3**).

As with the background, the field survey also inspected a much larger development footprint than more recent investigations. The survey, which included Aboriginal representatives, consisted of eight transects, that covered both the original and amended Rail links (**Figure 4**). Ultimately the field inspection identified a small number of isolated Aboriginal objects along the fringes of the Rail corridor, and several potential archaeological deposits (PADs), within which sub-surface cultural material was considered likely (**Figure 4**). The PADs were based on landform and proximity to water (Anzac Creek and Georges River), in combination with disturbance levels.

Once the Concept Plan Approval had been obtained for the project (29 September 2014), a further Aboriginal Heritage Impact Assessment (AHIA) was developed by AHMS in 2015 to inform the Environmental Impact Statement prepared for the Stage 1 Proposal. The key aim of this assessment was to characterise the cultural materials (if present) within the various PADs (2 and 3) along the Rail link corridor. Excavation was undertaken with participation of the Aboriginal stakeholders, and consisted of 13 test pits (1m²) at 20m spacing across these areas. Six of these focussed on Anzac Creek, while the remaining seven were situated on a ridge top overlooking Georges River (**Figure 5**).

In both areas, the excavations revealed a deep (50-90cm) coarse silt soil unit over-lying coffee rock of clay subsoils, and frequently impacted by introduced fill on the surface. The soil was characteristic of deposition by flooding of Georges River in the past. 28 Aboriginal objects were recovered from the test pits associated with Georges River, and suggested a low-level of past activity on the maximal upper slope and ridge in this area. Importantly, the assemblage was considered to reflect two different periods of activity in the past. The upper assemblage was characteristic of occupation in the last few thousand years, and this was corroborated by an OSL age of 3.4ka. The lower assemblage was found in association with an age of 18ka, and represents some of the earliest evidence of activity on the Georges River. The sand sheet itself began forming at ~60ka.

The works above identified that PAD 3 (encompassing much of the previous and amended Rail link) contained no cultural materials and could be de-listed. This was corroborated by other work along Anzac Creek by Navin Officer Heritage Consultants (2014), which similarly found little cultural material along its banks with the MIC site. PAD 2 was also re-considered and limited to an area encompassing the elevated areas immediately above Georges River. This area was re-labelled as MA14 to reflect its new identification as an artefact scatter and deposits (**Figure 6**).

Recommendations from this latter assessment the Stage 1 assessment identified that only MA14 required further archaeological assessment and mitigation to verify the site's antiquity and to obtain a larger volume of cultural material.

To the west side of Georges River (on the MIC site), two areas have been identified as of archaeological concern through AHMS (2012, 2015) and Navin Office Heritage Consultants (2014), both outside (but in close proximity) of the amended Rail link. Through the Aboriginal consultation process, AHMS (2012) identified an area of cultural value, which encompassed the slopes and floodplains along Georges River (**Figure 6**). No specific information was provided on this area, and the description suggests the identification was made based on the potential for material culture to occur (similar to the findings and sites identified on the east side of the river). Navin Officer Heritage Consultants (2014) also identified the western banks of Georges River as of archaeological importance, including a large site, MAPAD2, along the entire stretch of river. This site was ultimately divided into the three smaller sites (MA11-13 inclusive), but considered to retain high research potential, since excavations failed to reach the base of the deposits. Due to the large number of rail options for the MIC Proposal, Navin Officer Heritage Consultants did not undertake specific site investigations for these areas; rather they identified areas requiring future consideration. One of these areas is situated at the northern end of the area identified as having cultural value. Effectively, the two sites outlined here encompass the riparian corridor of the Georges River for ~1.5km, which are not located in close proximity to the amended Rail link.

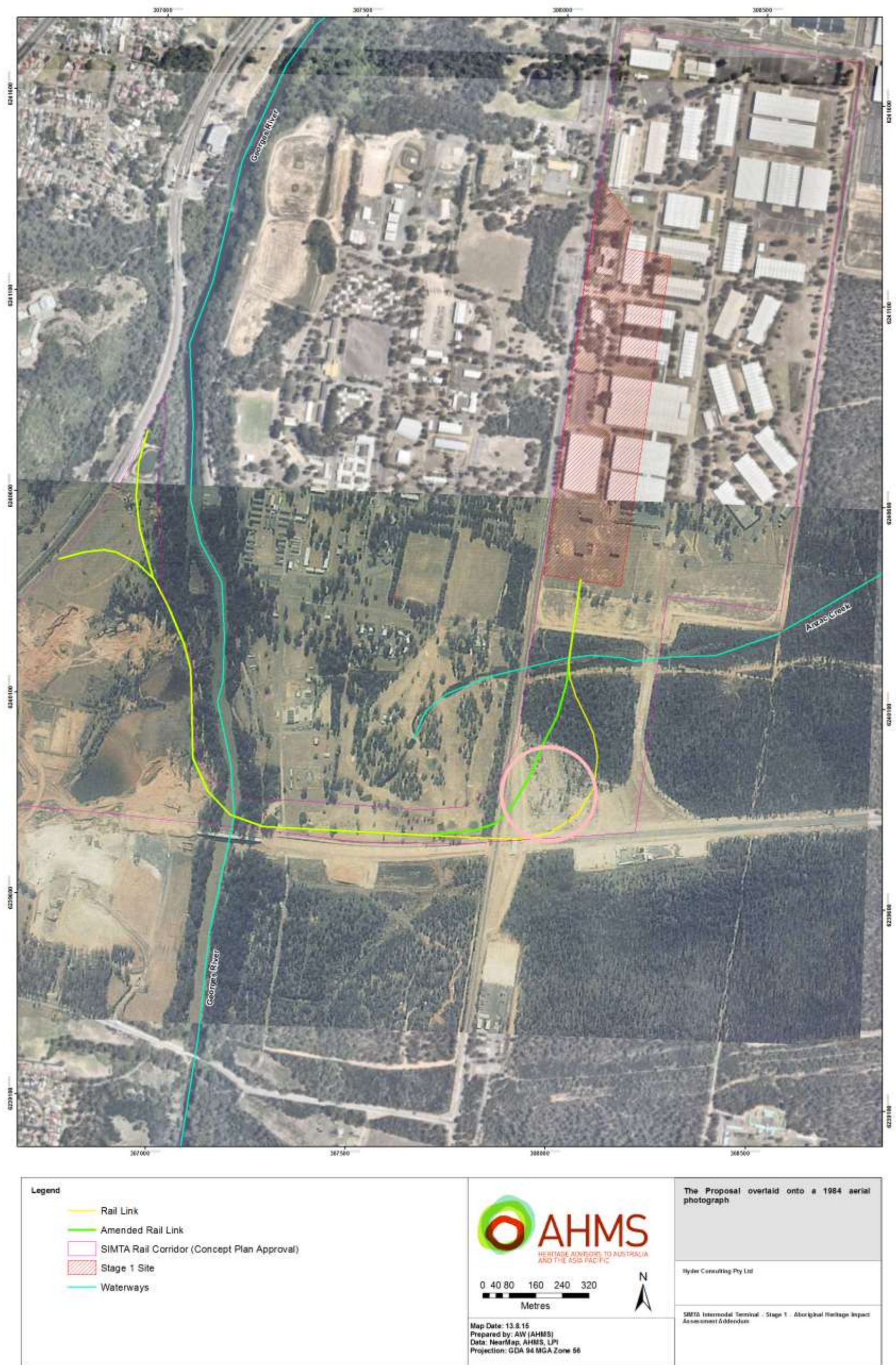


Figure 2. Map of the amended Rail link over a 1984 aerial photograph of the region. Note the previous disturbance shown by a pink circle.



Figure 3. Map of the amended Rail link over a 1994 aerial photograph of the region. Note the previous disturbance shown by a pink circle.

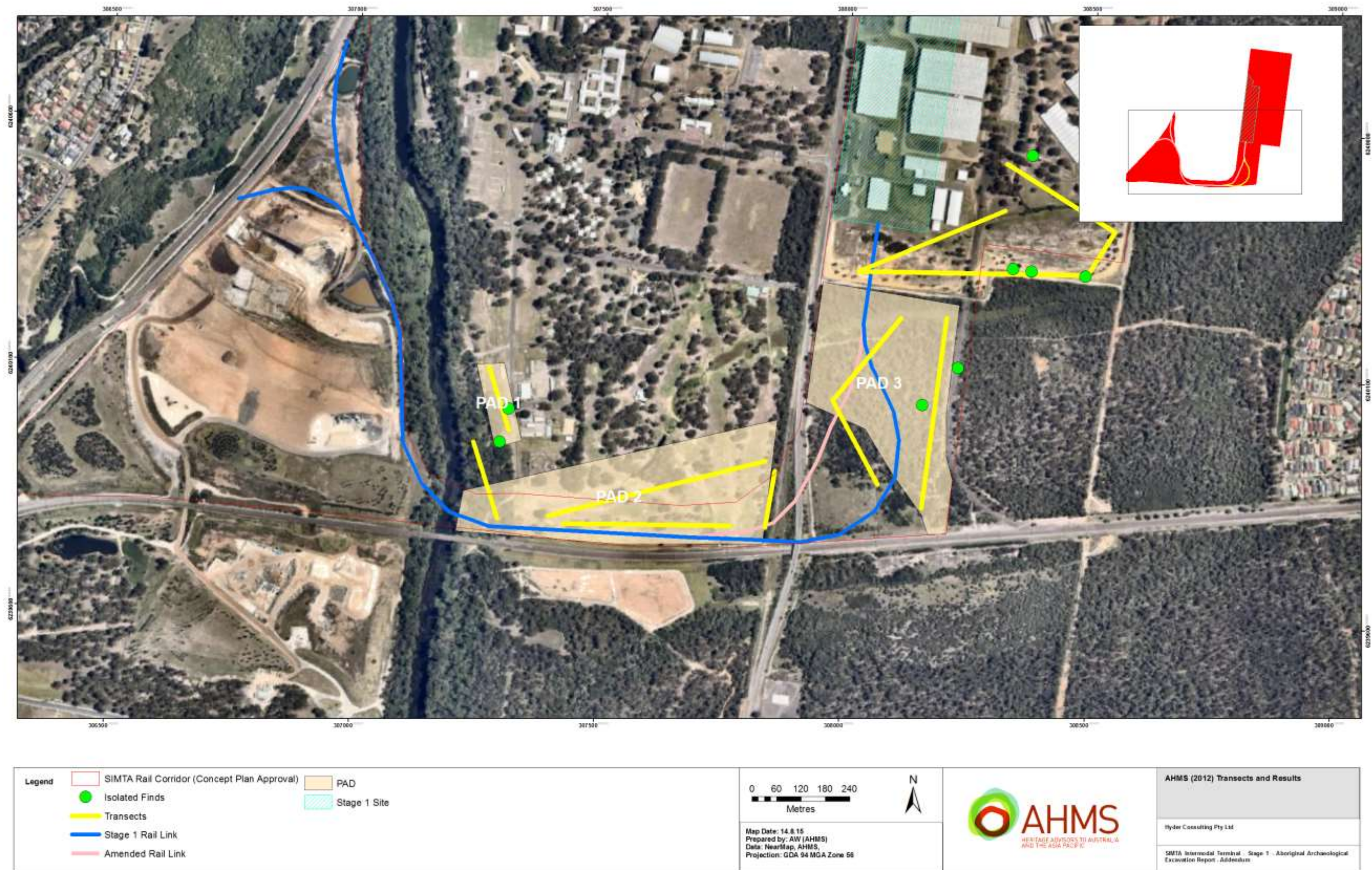


Figure 4. A summary of the 2012 assessment and findings.



Figure 5. The 2015 test excavations within PADs 2 and 3. The focus of these excavations was on areas close to water sources within the PAD curtilages, namely Anzac Creek and Georges River.

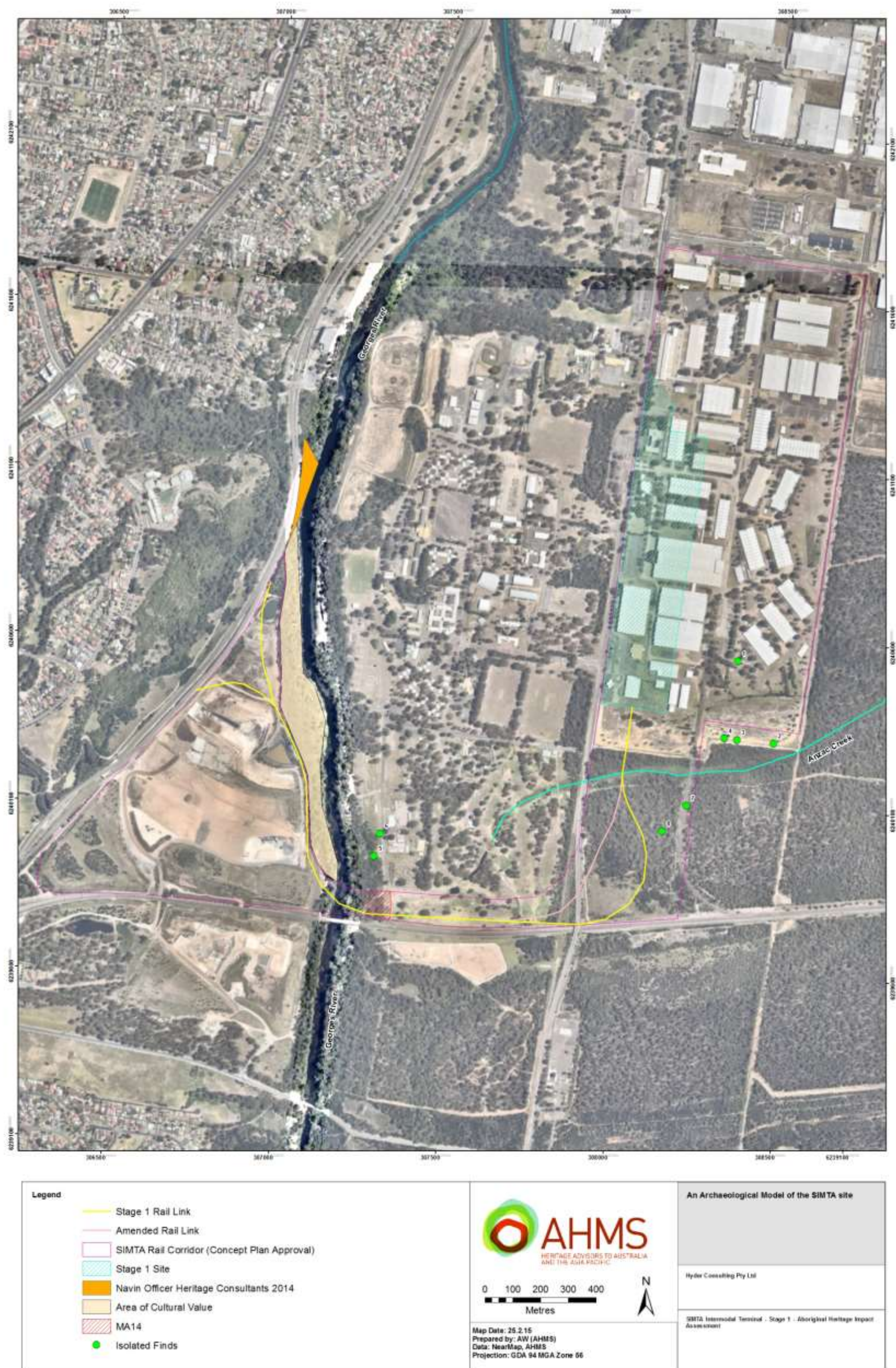


Figure 6. Map of Aboriginal objects/sites within the SIMTA site based on recent studies. Within the Stage 1 site, the key site identified was MA14, part of the original PAD 2, which has been shown to have the potential to contain significant cultural material. Other sites in close proximity to the amended Rail link are also presented. Areas not highlighted are considered to have low risk of impacting significant Aboriginal objects/sites.

Discussion and Conclusions

Previous archaeological studies have shown that Aboriginal objects and cultural materials in this region are focused on elevated landforms in close proximity to water sources. In the case of the Proposal, this means that any possible Aboriginal objects/sites would be situated close to Anzac Creek and Georges River. Subsequent works on the Rail link have shown that the ridge overlooking Georges River does indeed have evidence of Aboriginal occupation and activity in the past - potentially as far back as 18,000 years ago. Conversely, two separate excavations both have revealed that land adjoining Anzac Creek contained no, or very little, cultural materials. Other areas of the amended Rail link are considered unlikely to contain significant Aboriginal objects/sites, since they have been subject to extensive disturbance, including the construction of Moorebank Avenue and the East Hills Railway Line, and parts of the golf course within the MIC site.

Based on the above information, only the Rail link crossings at Anzac Creek and Georges River - the latter including MA 14 - are assessed as having a potentially high risk of impacting Aboriginal objects/sites. Of these, only the Georges River crossing has potential to impact significant cultural deposits. A review of the originally proposed route versus amended Rail link, indicates that the two creek crossings remain the same in terms of location and size. It is considered unlikely that the amendment to the Rail link, most notable in the Southern Boot Lands, would impact on significant Aboriginal objects/site based on the works undertaken through this area. Therefore we conclude that the amended Rail link alignment would result in no additional impact to Aboriginal heritage.

The Georges River Rail link crossing would still result in impacts to MA14, and the archaeological mitigation program proposed in AHMS (2015) AHIA should remain. All other recommendations in the AHIA should also remain in effect.

References

AHMS (2012) Aboriginal Cultural Heritage Assessment: SIMTA Moorebank Intermodal Terminal Facility. Unpublished Report for Hyder Consulting Pty Ltd.

AHMS (2015) Aboriginal Heritage Impact Assessment: SIMTA Moorebank Intermodal Terminal Facility. Unpublished Report for Hyder Consulting Pty Ltd.

Navin Officer Heritage Consultants (2014) Moorebank Intermodal Terminal, Aboriginal Cultural Heritage Assessment. Unpublished Report for Parsons Brinckerhoff.