

Chapter 13

Aboriginal heritage

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13 Aboriginal heritage

This chapter provides a summary of the assessment of potential Aboriginal heritage impacts during construction and operation of the project. The full Aboriginal heritage assessment is provided in Technical Paper 5 (Aboriginal heritage).

13.1 Overview

Surface and subsurface Aboriginal artefacts have been identified across the study area, and generally near water sources and areas that have been subject to low levels of past disturbance. Development of the project has largely avoided direct impacts to known Aboriginal sites and minimised the potential interface with areas with high Aboriginal archaeological potential, particularly with the provision of bridges and viaduct structures over waterways. Further consultation and field survey is being undertaken and test excavations would be carried out at sites with higher Aboriginal archaeological potential. Where Aboriginal archaeological objects are identified, archaeological results would be used for Aboriginal heritage interpretation in future stages, in consultation with Registered Aboriginal Parties.

Searches of the Aboriginal Heritage Information Management System (AHIMS) database found 10 sites registered within the construction footprint, with eight of these located on the airport site. Of the two sites located off-airport, one was identified as having been destroyed under the conditions of an Aboriginal Heritage Impact Permit. The other was a valid artefact scatter site (AHIMS ID 45-5-2640) located in the Aerotropolis Core construction footprint.

Further cultural information would also be gathered during consultation with Aboriginal parties and this would inform cultural design principles to be considered during design development.

13.2 Legislative and policy context

13.2.1 Off-airport

The primary legislation for the protection of Aboriginal heritage in NSW, including Aboriginal objects and Aboriginal places, is the *National Parks and Wildlife Act 1974* (NSW).

This assessment has been undertaken in accordance with the following guidance documents:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage, 2011)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (Department of Environment, Climate Change and Water (DECCW), 2010a)
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b)
- *Australia ICOMOS Charter for Places of Cultural Significance, 1999* (Burra Charter)
- EPBC Act consultation guidelines *Ask First* (Australian Heritage Commission, 2002) and *Engage Early* (Department of the Environment, 2016)
- *Designing with Country* (Government Architect NSW, 2020).

13.2.2 On-airport

The *Airports Act 1996* (Cth) outlines the framework for the regulation and management of activities within the airport sites that have the potential to cause environmental harm (including harm to heritage). Specific measures to prevent, control or reduce the environmental impact associated with Western Sydney International, including impacts on Aboriginal heritage values, are managed under the *Western Sydney Airport – Airport Plan* (Department of Infrastructure and Regional Development, 2016a).

The Aboriginal cultural heritage values of Western Sydney International are managed by the *Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan* (Western Sydney Airport, 2019b).

13.3 Assessment approach

13.3.1 Methodology

The Aboriginal heritage assessment comprised:

- a search of the AHIMS database for listed Aboriginal sites, undertaken in May 2020 for the study area
- review of the landscape context of the project, with specific consideration to its implications for past Aboriginal land use (archaeological potential)
- review of relevant archaeological and ethnohistoric information for the study area and its surrounding environment, including review of the *Defence Establishment Orchard Hills Heritage Management Plan* (GML Heritage Pty Ltd, 2013) and the *Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan*
- preparation of a predictive model to determine the archaeological potential in the study area
- archaeological field investigations within accessible areas
- consultation with Registered Aboriginal Parties, including to understand the cultural values significant to Aboriginal people resulting from traditions, observances, lore, customs, beliefs and history
- assessment of the significance of the archaeological potential
- assessment of the potential direct and indirect impacts of the project
- identification of mitigation measures to minimise the risk of impacting Aboriginal items or areas of Aboriginal cultural sensitivity.

Direct impacts are those with the potential to have a physical effect on a site, resulting in damage, partial destruction or full destruction. Potential direct impacts have been considered for known and potential Aboriginal archaeological sites and features within the construction footprint.

Indirect impacts are those that do not directly impact on the physical site itself but do have an impact on its cultural heritage significance. These include visual impacts and settlement and vibration and are likely to occur as a result of tunnelling. Potential indirect impacts have been considered for sites within a 200 metre buffer area outside the construction footprint.

Further details on the Aboriginal heritage assessment methodology are provided in Technical Paper 5 (Aboriginal heritage).

Study area

The study area forms the boundary for the AHIMS searches undertaken for this assessment comprising an area of around 58 kilometres by nine kilometres centred on the project alignment. The larger study area allows for consideration of the project within a broader landscape context.

The risk for accidental and indirect impacts on sites outside the boundaries of, but close to, the construction footprint has been addressed by considering sites within a 200 metre buffer area around the construction footprint.

For ease of reference in this assessment, the off-airport and on-airport areas have been divided up into the construction sites required to support construction of the project (refer to Chapter 8 (Project description – construction)) including the indicative temporary and permanent power supply routes.

Significance assessment

In Australia, the primary guide to the assessment of cultural significance is the Burra Charter for which significance assessments are required to consider the social value, historic value, aesthetic value and scientific value of an item or place. Definitions of these terms are included in Technical Paper 5 (Aboriginal heritage).

Social and cultural values are not limited to specific sites or objects or physical expressions of place, and are considered either present or not. Registered Aboriginal Parties will not draw a hierarchical distinction between sites and features.

13.3.2 Consultation

Aboriginal community consultation was undertaken in accordance with the requirements of the Aboriginal Cultural Heritage Consultation Requirements for Proponents. Following newspaper advertisements and letters requesting registration, a total of 68 Registered Aboriginal Parties registered for consultation regarding the project. The draft methodology for survey and test excavation was provided to the Registered Aboriginal Parties for comment with responses received predominantly agreeing with the proposed methodology without changes. Consultation provided an opportunity for information to be shared on the cultural heritage values of the study area.

Inspections of accessible areas was undertaken with a representative from the relevant Local Aboriginal Land Councils (LALC); Gandangara LALC and Deerubbin LALC. Feedback from the LALC representatives during the inspections indicated that the waterways within and in proximity to the construction footprint have cultural significance as pathways and focal resource areas for Aboriginal people in the past. Consultation with Registered Aboriginal Parties helped to determine areas of archaeological potential which were largely focused on areas of low disturbance near waterways.

The draft Aboriginal Cultural Heritage Assessment Report (ACHAR) was provided to the Registered Aboriginal Parties for review and comment during July and August 2020. The feedback received from the Aboriginal community regarding the Aboriginal cultural heritage values associated with the study area is outlined in Chapter 5 (Consultation).

Ongoing consultation with Aboriginal knowledge holders and other Aboriginal stakeholders would be undertaken to ensure cultural design principles and interpretation aspects are considered as part of the design development process for the project.

13.3.3 Additional investigations and reporting

During and following exhibition of this Environmental Impact Statement the following additional investigations and reporting are proposed:

- further field inspections would be required for sites that were unable to be accessed during preparation of this assessment. An archaeological survey would be undertaken of these areas, targeting areas of high sensitivity likely to be impacted by the project
- a program of archaeological test excavation would be required across the whole project area to determine the presence or absence of subsurface archaeological deposits in areas of archaeological sensitivity at risk of direct impacts, if required
- an Aboriginal Archaeological Report (AAR) would be produced to report the findings of the fieldwork program in accordance with the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales
- an updated ACHAR would be prepared which would include the cultural heritage findings of the field investigation, test excavation and Registered Aboriginal Party consultation. The updated ACHAR would be provided to Registered Aboriginal Parties for comment and feedback prior to its finalisation and inclusion as part of the Submissions Report prepared for the project
- an Aboriginal Cultural Heritage Management Plan (ACHMP) would be prepared to manage potential Aboriginal cultural heritage impacts associated with the project. The ACHMP would outline management actions including conservation, protection and mitigation, and authorise harm where appropriate.

For further information in relation to the additional investigations and reporting proposed following exhibition of the Environmental Impact Statement please refer to Technical Paper 5 (Aboriginal heritage).

13.4 Existing environment

13.4.1 Off-airport

Landscape and archaeological context

The project is located between the suburbs of St Marys and Bringelly and generally comprises flat to undulating topography, with floodplains, watercourses and their tributaries. South Creek is a significant feature of the catchment and is generally located between 200 metres and two kilometres east of the project. Tributaries of South Creek cross the project at multiple locations, including Blaxland Creek, Cosgroves Creek and Badgerys Creek. These waterways would have been an important resource for past Aboriginal groups in this area.

Historic land use practices such as vegetation clearing, damming and flood mitigation works in this area have resulted in the likely disturbance of any pre-existing Aboriginal sites and deposits. However, overall disturbance is minimal south of the M4 Western Motorway in comparison with the urban area of St Marys in the north which has been subject to large scale residential, commercial, road and rail development.

Previous assessments undertaken across this region have identified the presence of surface and subsurface Aboriginal artefacts. These are commonly artefact sites and have generally been found near water sources and areas that have been subject to low levels of past disturbance.

Consultation with Registered Aboriginal Parties has identified that cultural values are present within the study area in association with the previously identified sites within the study areas. These values can be interpreted as physical markers indicating the long-term presence of Aboriginal people in this region, and the waterways which connect the larger features of the landscape and the sites across it.

Recorded Aboriginal sites

A total of 360 registered Aboriginal sites were identified across the study area. Of these, two sites were located within the off-airport construction footprint and 22 sites were identified within the 200 metre buffer surrounding the off-airport construction footprint.

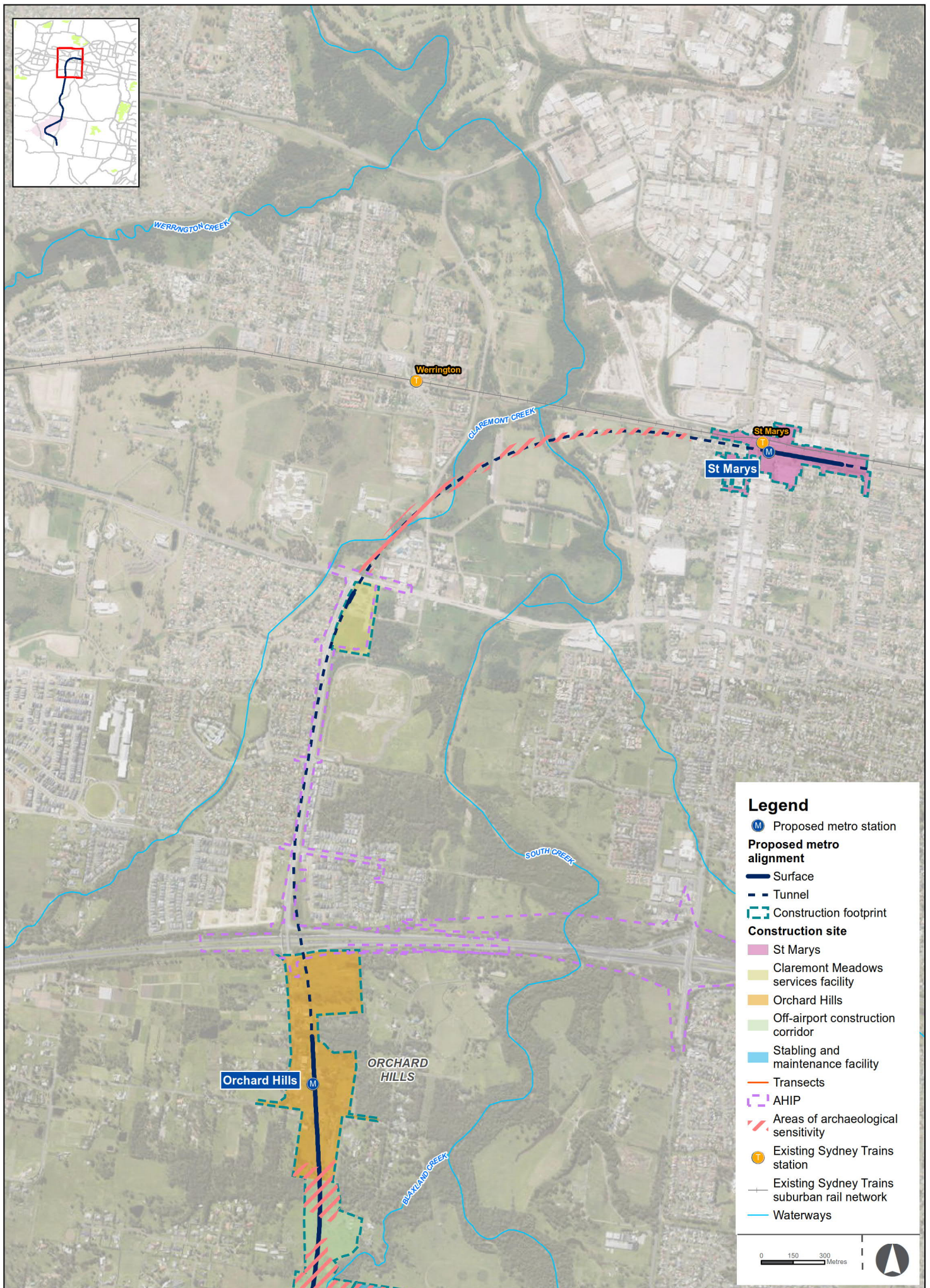
Of the two sites located within the off-airport construction footprint, one was located within the Aerotropolis Core construction site and has low to moderate scientific significance based on its research value. The other is located within the Claremont Meadows services facility construction site and has been destroyed under the conditions of Aboriginal Heritage Impact Permit (AHIP) C0000637.

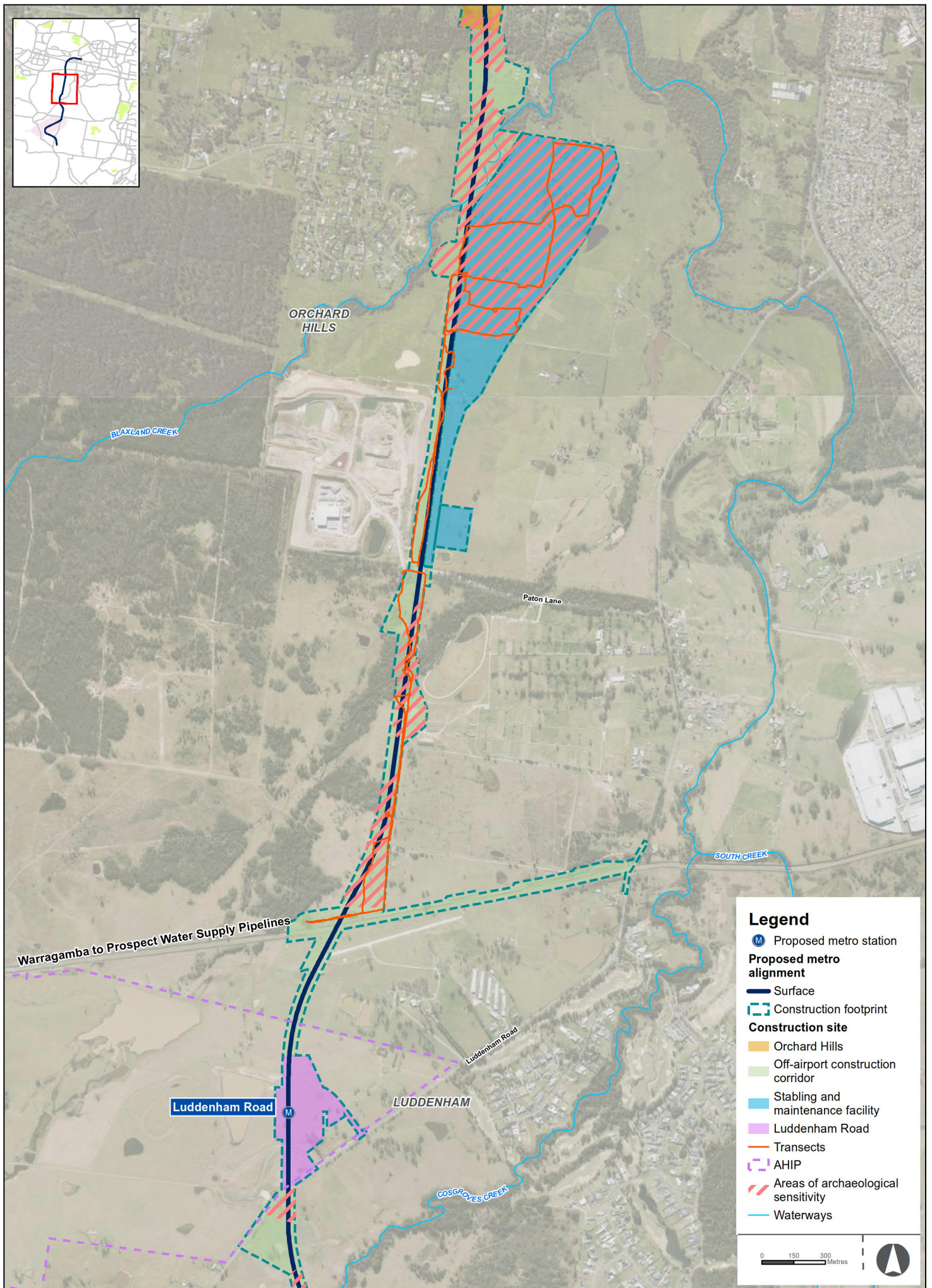
A summary of the off-airport AHIMS sites is provided in Table 13-1. The location and distribution of AHIP boundaries is presented in Figure 13-1. AHIMS sites are not presented in the public exhibition version of this chapter.

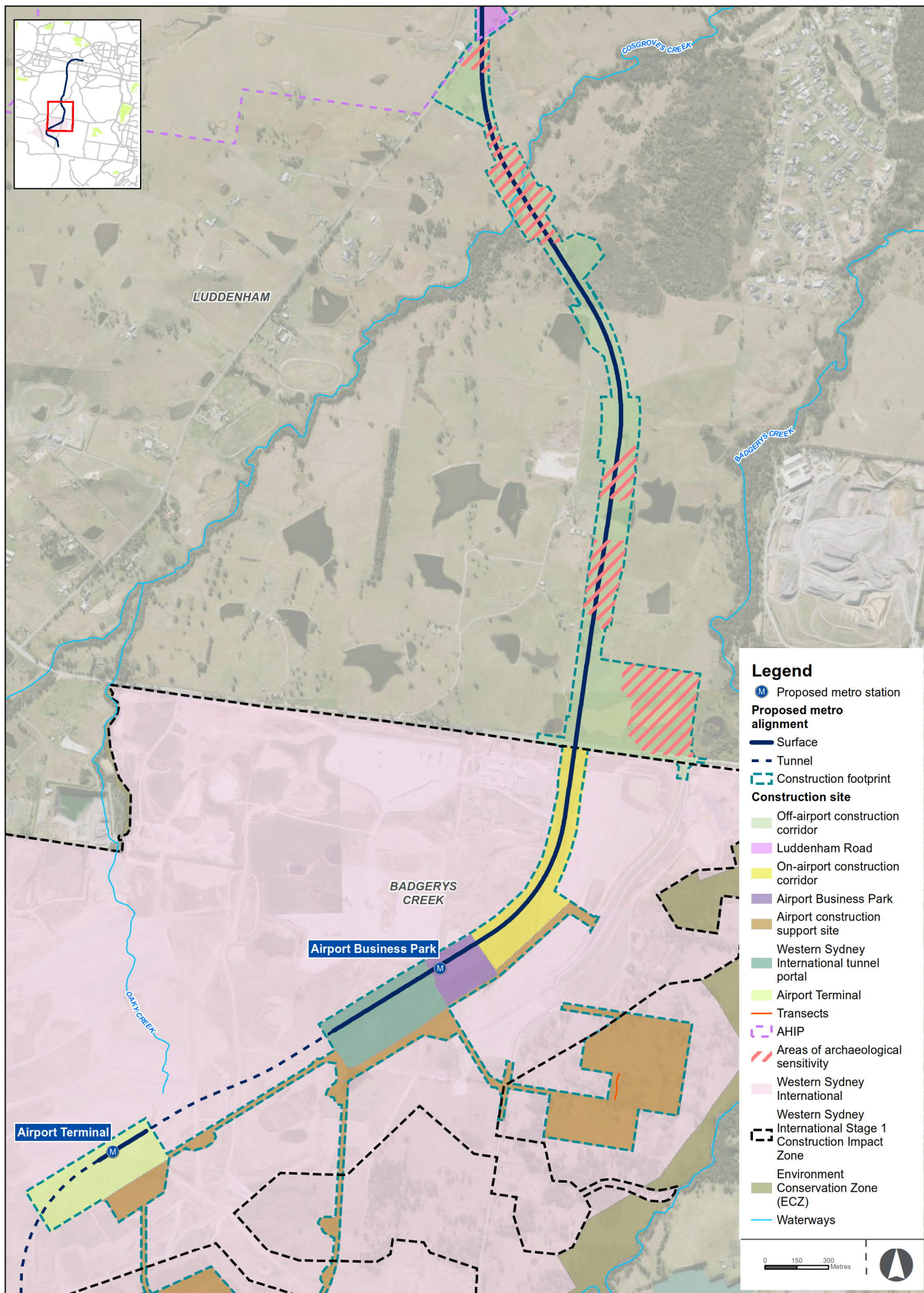
Table 13-1 AHIMS sites within the off-airport construction footprint

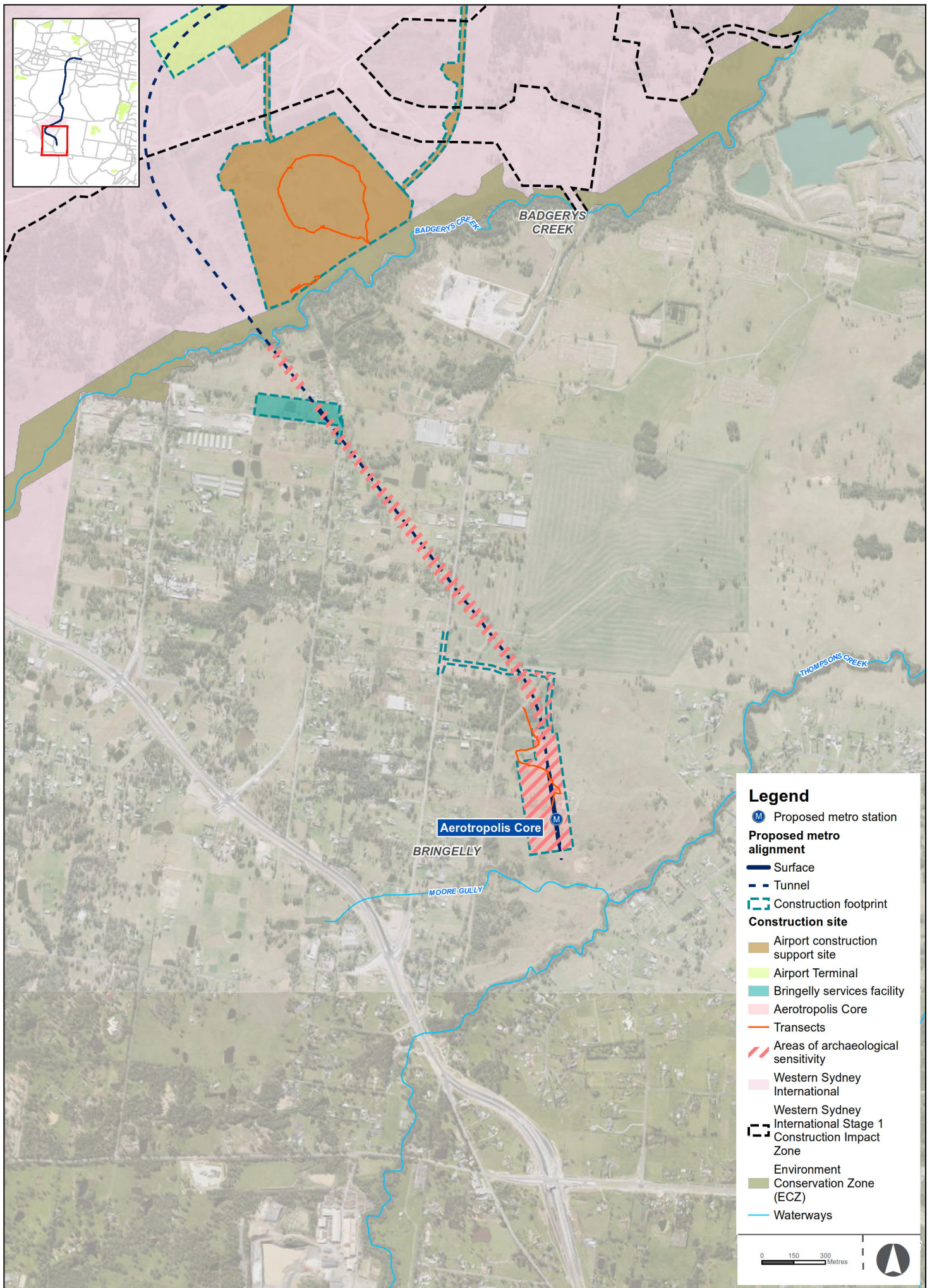
Site ID	Site name	Site type/status	Off-airport construction site
45-5-4420	GS3	Destroyed	Claremont Meadows services facility
45-5-2640	B22	Artefact scatter	Aerotropolis Core

Consideration was also given to previously recorded sites identified in surface contexts above the tunnel sections of the alignment. There are areas of archaeological potential within the ground surface above the tunnel alignments, but it is unlikely that these would be impacted by the project, as the tunnelling would be at depth and is unlikely to impact on either surface sites or deposits.









Aboriginal heritage along the project alignment

Figure 13-1d

Field investigation results

The areas where field investigations were undertaken (transects) and identified areas of archaeological sensitivity are shown in Figure 13-1.

During the field investigations, one site identified during desktop assessment at the Aerotropolis Core construction site (listed in Table 13-1 as 45-5-2640) was targeted for inspection. No surface artefacts were visible; however, it was concluded that the site is likely still valid, with artefacts remaining under the grass and/or in subsurface deposits.

13.4.2 On-airport

Recorded Aboriginal sites

Of the 360 registered Aboriginal sites identified across the study area, eight sites were located within the on-airport construction footprint as outlined in Table 13-2. Of these eight sites, six were located within the Western Sydney International Stage 1 Construction Impact Zone and two were located outside the Stage 1 Construction Impact Zone. The higher number of sites identified within the on-airport area is indicative of the high level of archaeological investigation that has occurred in this area, rather than that area necessarily having more sites than the off-airport area.

The Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan contains protocols for the removal and protection of all known sites within Western Sydney International.

Table 13-2 AHIMS sites within the on-airport construction footprint

Site ID	Site name	Site type	On-airport construction site
45-5-2637	B5	Artefact scatter	Airport construction support site
45-5-2665	B88	Artefact scatter	On-airport construction corridor
45-5-2687	B71	Artefact scatter	Airport Terminal
45-5-5068	B131	Isolated artefact	On-airport construction corridor
45-5-5078	B136	Isolated artefact	Airport construction support site
45-5-5089	B163	Artefact scatter	On-airport construction corridor
45-5-5094	B154	Artefact scatter	On-airport construction corridor
45-5-5100	B147	Artefact scatter	Airport construction support site

Field investigation results

Field investigations were undertaken within the airport site outside the Western Sydney International Stage 1 Construction Impact Zone. Of the eight recorded sites, only one of these sites was able to be found during archaeological field investigations (listed in Table 13-2 as 45-5-5078).

13.5 Potential impacts

13.5.1 Off-airport

Direct impacts

There is one known Aboriginal site, areas of cultural value and areas of archaeological potential intersecting with the construction footprint that may be directly affected by the project. Based on these findings, further investigations will be undertaken, including further consultation, survey and test excavation prior to construction commencing.

Potential direct impacts as a result of the project at the relevant construction site are assessed in Table 13-3. Where potential impacts have been identified they would be managed in line with the mitigation measures outlined in Section 13.6.2.

The results of additional field investigations for sites unable to be accessed for this assessment, including survey, test excavation and consultation, would be reported in the updated ACHAR.

Table 13-3 Potential off-airport Aboriginal heritage impacts

Construction site	Potential impacts
Orchard Hills construction site	Potential for impacts on: <ul style="list-style-type: none"> • areas of archaeological sensitivity identified in elevated areas to the south of Lansdowne Road, if present • cultural heritage values.
Stabling and maintenance facility construction site	Potential for impacts on areas of archaeological sensitivity identified in elevated areas adjacent to Blaxland Creek and South Creek and adjacent floodplains, if present.
Off-airport construction corridor – between the Orchard Hills and Luddenham Road construction sites	Potential for impacts on: <ul style="list-style-type: none"> • known AHIMS sites (artefact scatters) located outside the construction footprint but within the 200 m buffer zone • areas of archaeological sensitivity identified along Blaxland Creek and other unnamed tributaries, if present • cultural heritage values.
Off-airport construction corridor – between Luddenham Road construction site and Elizabeth Drive	Potential for impacts on: <ul style="list-style-type: none"> • areas of archaeological sensitivity identified along the flats of the lower slopes around Cosgroves Creek and unnamed drainage lines, if present • cultural heritage values.
Bringelly services facility construction site	Potential for impacts on: <ul style="list-style-type: none"> • known AHIMS sites (artefact scatters) located outside the construction footprint but within the 200 metre buffer zone • areas of archaeological sensitivity identified, if present • cultural heritage values.
Aerotropolis Core construction site	Potential for impacts on: <ul style="list-style-type: none"> • known AHIMS site 45-5-2640 (artefact scatter) located within the construction footprint • known AHIMS sites located outside the construction footprint but within the 200 m buffer zone • areas of archaeological sensitivity, if present • cultural heritage values.
Permanent power supply route	Potential for impacts on: <ul style="list-style-type: none"> • known AHIMS sites located in proximity to the power supply route • areas of archaeological sensitivity identified along both banks of South Creek are unlikely to be impacted as horizontal directional drilling would largely avoid surface impacts • cultural heritage values. <p>Trenching works would be kept within the road reserves where possible and horizontal directional drilling is proposed underneath South Creek to minimise impacts. Further design development to confirm the permanent power supply route would seek to minimise impacts, including on Aboriginal heritage items.</p>
Kemps Creek construction power supply route	Potential for impacts on: <ul style="list-style-type: none"> • areas of archaeological sensitivity identified along both banks of South Creek and Badgerys Creek, if present • cultural heritage values. <p>Trenching works would be kept within the road reserves where possible and horizontal directional drilling is proposed underneath creeks to minimise impacts. Further design development to confirm the temporary power supply route would seek to minimise impacts, including on Aboriginal heritage items.</p>

Construction site	Potential impacts
Claremont Meadows power supply route	<p>Potential for impacts on:</p> <ul style="list-style-type: none"> • a known AHIMS site • remaining cultural values associated with two previously destroyed AHIMS sites located in proximity to the power supply route. <p>Trenching works would be kept within the road reserves where possible to minimise impacts. Further design development to confirm the temporary power supply route would seek to minimise impacts, including to Aboriginal heritage items.</p>

Indirect impacts

Potential indirect impacts associated with the project include risks to cultural heritage by settlement and vibration. Vibration from tunnelling is unlikely to impact artefact-bearing deposits as the tunnels are deep enough as to not impact subsurface deposits.

The most likely site types to be indirectly impacted are rock shelters, art sites and grinding grooves which can all be affected by cracking and breaking caused by vibration and settlement. None of these site types have been identified in surface contexts above the tunnel sections of the project alignment.

Where archaeological potential has been identified (see Figure 13-1), the surface area above the proposed tunnel alignment would need to be ground-truthed to confirm presence of archaeological sites and understand potential settlement impacts on them. This would be managed in line with the mitigation measures outlined in Section 13.6.2.

13.5.2 On-airport

There are known Aboriginal sites, areas of cultural value and areas of archaeological potential within the on-airport environment. The Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan contains protocols for the removal and protection of all known sites within Western Sydney International.

For sites that are not removed as part of the Western Sydney International development, Sydney Metro would prepare an Aboriginal Cultural Heritage CEMP for the on-airport rail works which would include the related methodologies for collection and salvage of sites that remain within the construction footprint where required, unexpected finds, and outlining nominated sites for protection. The CEMP would align with the Western Sydney International Survey and Salvage Plan.

13.6 Proposed management and mitigation measures

Environmental management for the project would be undertaken through the approach detailed in Chapter 25 (Environmental management and mitigation). The construction and operational environmental management frameworks are discussed in sections 25.2 and 25.3 respectively.

Under these broad frameworks, a series of performance outcomes have been developed to define the minimum environmental standards that would be achieved during construction and operation of the project (see Section 13.6.1), and mitigation measures that would be implemented during construction and operation to manage potential identified impacts (see Section 13.6.2).

13.6.1 Performance outcomes

Performance outcomes have been developed consistent with the requirements of the SEARs for the project. Performance outcomes for the project in relation to Aboriginal heritage are listed in Table 13-4 and identify measurable, performance-based standards for environmental management.

Table 13-4 Aboriginal heritage performance outcomes

SEARs desired performance outcomes	Project performance outcome	Timing
The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation and management of the heritage significance of items of Aboriginal objects and places	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 of Aboriginal people in New South Wales	Construction
	Impacts on areas of archaeological potential and significance are avoided or minimised, where practical	Construction
The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of Aboriginal objects and places	The design of the project incorporates Aboriginal heritage interpretation and Aboriginal cultural design principles in consultation with Aboriginal stakeholders	Operation

13.6.2 Mitigation measures

A Construction Environmental Management Framework (CEMF) (Appendix F)) describes the approach to environmental management, monitoring and reporting during construction. Specifically, it lists the requirements to be addressed by the construction contractor in developing the Construction Environmental Management Plans (CEMP), sub-plans, and other supporting documentation for each specific environmental aspect.

The Aboriginal Cultural Heritage CEMP for the on-airport works would be developed in consultation with Western Sydney Airport and would be consistent with the existing Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan.

The mitigation measures to manage potential Aboriginal heritage impacts of the project are listed in Table 13-5.

Table 13-5 Aboriginal heritage mitigation measures

Ref	Mitigation measure	Applicable location(s)
Construction		
AH1	Aboriginal stakeholder consultation would continue to be carried out in accordance with the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (NSW Office of Environment and Heritage, 2010). Registered Aboriginal Parties would participate in future site inspections and test excavations. Measures to manage and protect the identified cultural values would be developed collaboratively through this consultation process to inform design development and heritage interpretation	Off-airport
AH2	Survey would be undertaken, with Registered Aboriginal Parties, in the areas of archaeological sensitivity where field investigations have not already been completed or where ground surface visibility limited the effectiveness of past inspections. The surface areas above the tunnel alignment would also be ground-truthed to ensure there are no site types directly above the tunnel that would be damaged by subsidence, with site-specific mitigation measures to be developed where any are found to be present	Off-airport
AH3	Test excavation would be undertaken in ground-truthed areas of confirmed archaeological sensitivity, to determine the presence or absence of subsurface archaeological deposits, where project impacts are anticipated	Off-airport

Ref	Mitigation measure	Applicable location(s)
AH4	Following the test excavation program, an Aboriginal Cultural Heritage Management Plan would be prepared. The Aboriginal Cultural Heritage Management Plan would identify management actions including conservation, protection and mitigation, and would authorise harm where appropriate and provide further detail in relation to salvage excavation program if required	Off-airport
AH5	The temporary repository of any retrieved artefacts would be appropriately secured and under the care of the archaeological consultant If retrieved, further consultation with Registered Aboriginal Parties would be required to determine the preferred long-term care and management of any retrieved Aboriginal artefacts	Off-airport
AH6	Aboriginal Heritage Information Management System site cards would be produced for newly identified sites and submitted to the Aboriginal Heritage Information Management System Registrar as soon as practicable	Off-airport
AH7	Aboriginal Site Impact Recording forms would be submitted to the Aboriginal Heritage Information Management System register for all Aboriginal Heritage Information Management System registered Aboriginal sites that are impacted by the project	Off-airport
AH8	If any suspected human remains or unexpected Aboriginal cultural heritage objects are discovered within the on-airport area, all activity would cease and the unexpected finds protocol and discovery of human remains protocol specified in the Western Sydney Airport Aboriginal Cultural Heritage Construction Environmental Management Plan would be followed	On-airport

13.6.3 Consideration of the interaction between measures

Mitigation measures in other chapters that are relevant to the management of Aboriginal heritage impacts include:

- Chapter 10 (Noise and vibration), specifically measures which address the management of potential vibration impacts on heritage sites during construction
- Chapter 12 (Non-Aboriginal heritage), specifically measures relating to heritage interpretation
- Chapter 15 (Groundwater and geology), specifically measures which address the management of ground settlement.