

6.4 Aboriginal heritage

This section provides a summary of the assessment of potential impacts to Aboriginal heritage during construction and operation of the proposal and identifies mitigation measures to address these impacts. A detailed assessment of Aboriginal heritage impacts is presented in the Aboriginal cultural heritage assessment report (ACHAR) (Appendix G). This assessment covers the entirety of the Great Western Highway Upgrade Program (Katoomba to Lithgow) and not just the proposal (Little Hartley to Lithgow).

6.4.1 Methodology

The Aboriginal heritage assessment involved the following:

- Desktop assessment of the environmental context, local and regional character of Aboriginal land-use, and the development of a predictive model for Aboriginal site distribution
- Desktop assessment of AHIMS registered sites, other heritage databases and an examination of previous Aboriginal cultural heritage investigations
- Consultation with registered Aboriginal parties in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010) undertaken from November 2019 until July 2021
- Archaeological survey of the construction site conducted between November 2019 and March 2020 with representatives from Aboriginal stakeholder groups to locate previously identified Aboriginal heritage sites and any unidentified Aboriginal heritage sites
- Archaeological assessment including field inspection and test excavation carried out in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW. The purpose of the test excavations was to confirm whether Aboriginal objects were present in the subsurface soils in a site or PAD, and if so to provide information about the type, extent of site boundary and density of Aboriginal cultural materials.
- Assessment of cultural heritage significance values of Aboriginal sites in and near the study areas
- An assessment of impacts to the Aboriginal heritage significance values of any Aboriginal sites
- Identification of mitigation measures to minimise adverse impacts to the heritage significance of Aboriginal sites, including archaeological investigation

6.4.2 Existing environment

Aboriginal context

The Forty Bends construction footprint is located close to the traditional boundaries of the Wiradjuri, Gundungurra and Darug people and within the boundaries of the Bathurst Local Aboriginal Land Council (LALC). The exact boundaries are not known and it is suggested that instead of a fixed boundary there was actually a 'zone of interaction' between the Wiradjuri, the Darug and the Gundungurra people (Jacobs, 2020). The Wiradjuri, Gundungurra and Darug all had their own language although the three nations could communicate with each other. They each had their own distinct spiritual beliefs and creation stories. Each nation moved within their defined territories according to the seasons, along well established pathways.

A variety of resources were utilised by Aboriginal groups within the upper Blue Mountains. Basalt is available as water-rolled pebbles in the Grose River, and other major streams. Chert is another raw material known to be used for tool use. Chert is a glossy, fine-grained siliceous stone which was often used to create knives, scrapers, and points due to the sharp edge it can create.

Aboriginal cultural heritage register searches

A search of the State Heritage Register (SHR) for Aboriginal sites located within the Upper Blue Mountains region was carried out in July 2021. No sites were identified within the study corridor.

A search of Aboriginal sites and places listed in Schedule 5 of the Blue Mountains 2015 LEP and Lithgow 2014 LEP within a one-kilometre radius of the operational footprint was carried out in July 2021. No Aboriginal sites or places identified within a one-kilometre search radius.

A search of the National Native Title Register was conducted in November 2019. The search identified that there are two native title claimants or native title holders within the construction footprint. These include:

- Native Title claim NC2018/002 Warrabinga-Wiradjuri #7
- Land use Agreement NI2014/001 - Gundungurra Area Agreement.

A search of Aboriginal objects, sites, and places registered on the Aboriginal Heritage Information Management System (AHIMS) within 100 meters of the Great Western Highway Upgrade Program was completed in July 2021. The search identified 36 previously registered Aboriginal sites or areas of Potential Archaeological Deposits (PAD) within 50 metres of the Great Western Highway Upgrade Program, consisting of:

- 20 isolated artefacts
- One modified trees (carved or scarred)
- Seven open camp sites
- One isolated artefact and modified tree (carved or scarred)
- Six habitation structures (rockshelters), and PAD
- One habitation structure (rockshelter), PAD, and modified tree (scarred tree).

Further interrogation of the site card data and mapping show that only 11 discrete site records may be reliably reported to occur within the study area. This is due to unreliable archaeological site assessment and recording, destruction of sites during earlier construction projects, replicated site recordings or inaccurate map coordinates on site cards.

Archaeological field survey

Archaeological field survey was carried out between November 2019 and March 2020. The objective of the archaeological survey was to adequately assess the study area and identify any archaeological objects, or areas with the potential to contain PADs.

Following the survey, 28 AHIMS sites located in the study area were reappraised as not being Aboriginal sites and were removed from further consideration. For the most part this was due to natural stone fragments being mis-identified as Aboriginal flaked stone artefacts.

The archaeological survey resulted in the identification of four new Aboriginal sites:

- GWHRS01
- GWHAS01
- GWHST01
- Forty Bends Contact Site

With the incorporation of these sites into the previously recorded sites, a total of 16 Aboriginal sites are located within the construction footprint (Table 6-53), and 8 are located within the study area (but outside of the construction footprint) (Table 6-54).

Table 6-53 Aboriginal sites within the construction footprint

AHIMS ID	Site name	Site features
45-4-0969	SP1	Original location of modified tree (carved or scarred) which has been moved and is now located outside of the study area and recorded as AHIMS 45-4-0980 (refer to Table 6-54)
45-4-0993	River Lett Jenolan Caves Road	Open artefact scatter with 40 artefacts
45-4-1045	GWH 01	Habitation structure, PAD, modified tree (carved or scarred)
45-4-1071	GWH 08	Open artefact scatter
45-4-1072	GWH 09	Open artefact scatter
45-4-1074	GWH 11	Open artefact scatter
45-4-1075	GWH 12	Open artefact scatter
45-4-1081	GWH 18	Open artefact scatter
45-4-1082	GWH 19	Open artefact scatter
45-4-1084	GWH 06	Open artefact scatter
45-4-1097	GWH 07	Open artefact scatter and bone site
45-4-1102	GWH 29	Open artefact scatter
45-4-1103	GWH 31	Open artefact scatter
45-4-1105	GWH 33	Scarred tree
45-4-1106	GWH 34	Isolated find
45-4-1111	GWH 42	Habitation structure and PAD

Table 6-54 Aboriginal sites within the study area (but outside the construction footprint)

AHIMS ID	Site name	Site features
45-4-1081	Blackheath cemetery	Artefact – open camp site
45-4-0935	Hartley Historic Village	Artefact – Isolated find
45-4-0980	SP1	Modified tree (carved or scarred) which was moved from its original location as AHIMS site 45-4-0969.
45-4-0993	River Lett Jenolan Cave Road	Artefact
TBD ¹	GWHRS01	Habitation structure, PAD
45-4-1111	GWH42	Habitation structure, PAD
TBD	GWHST01	Scarred tree
TBD ¹	Forty Bends contact site	Contact site

Note 1: Sites are protected as per the Code of Practice and no test excavation is proposed. The dominant site types present were open artefact scatters and isolated finds

Potential archaeological deposits

A total of nine PADs were confirmed to occur within 50 metres of the proposal (not including 'Rockshelters with PAD' listed in Table 6-53 above). These PADs are described in Table 6-55.

Table 6-55 Potential archaeological deposits

PAD ID	Landform	Size of PAD (m)	Description
GWH20-1	Upper slope and crest	480 x 50	High ground within 200 metres and overlooking River Lett west/north bank at Little Hartley (area within construction corridor)
GHW20-2	Lower slope	190 x 70	Lower slope within 200 metres and adjacent to second order tributary of River Lett at Little Hartley (area within construction corridor)
GHW20-3	Lower slope	370 x 90	Gentle lower slope within 200 metres of second order tributary to Butlers Creek at Hartley – bisected by existing Great Western Highway (area within construction corridor)
Magpie Hollow Road	Lower slope	245 x 45	Gentle lower slope within 200 metres of ephemeral second order tributary to Bowens Creek. PAD is adjacent to the GWH and abutted by Magpie Hollow Road (area within construction corridor)
South Bowenfels Rural Fire Brigade	Lower slope	62 x 100	Gentle lower slope within 200 metres of ephemera second order tributary to Bowens Creek. PAD is adjacent to the GWH and abutted by Mudjee Street (area within construction corridor)
Robsons PAD 1	Mid slope	260 x 120	Large PAD area comprising a lower alluvial terrace, spanning both sides of a small third order stream leading to Whites Creek.
Robsons PAD 2	Mid slope	160 x 120	Elevated hilltop area on a mid slope below Hassan Walls Range. Within 200 m of a small third order stream leading to Whites Creek. PAD is associated with Robsons Contact Site and has shallow soils.
River Lett Hill	Hill top	100 x 180	PAD area on an elevated hilltop area on granitic shallow soils overlooking the River Lett Valley to the SE.
Area to the west of 45-4-1097 (GWH 07)	Mid slope	60 x 100	A sloping lower slope within 200 m of River Lett. Bisected by Jenolan Caves Road cutting to the east and disturbance from irrigation and the GWH.

Test excavation

Test excavations were conducted in each of the PADs in Table 6-55, as well as at the portion of registered sites with associated PAD sites within the study area (where permission was granted by landowners). The purpose of the test excavations was to confirm whether Aboriginal objects were present in the subsurface soils in a site or PAD, and if so to provide information about the type, extent of site boundary and density of Aboriginal cultural materials.

The proposal test excavation program identified archaeological evidence of Aboriginal occupation widely distributed across rolling hills, flats and plains, waterway terraces and creek valleys crossed by the construction footprint. Artefact density varied considerably across the study area, with higher density subsurface artefact sites in the River Lett, Robsons and Hartley site complexes and much lower artefact density in the areas toward Cox River Road to the east.

Test excavation found evidence of repeated Aboriginal stone artefact use in the areas on River Lett Hill, Hartley and on the Robson property, camping activity along River Lett at Jenolan Caves Road, and artefact scatters along tributaries associated with Whites Creek, Butlers Creek, and Boxes Creek. Evidence of activities along minor watercourses and occupation at the western margin of the construction footprint on an alluvial terrace in South Bowenfels was also confirmed.

Following the completion of the test excavation, areas previously designated as PADs were reclassified as Aboriginal objects where artefacts were recovered or have been discarded where none were found. Table 6-56 outlines the final sites confirmed by the test excavation within the construction footprint, summarises the results of the test excavations, and also outlines the changes to nomenclature throughout the assessment process. Table 6-57 provides the same information but for sites located within the study area but outside of the construction footprint.

Table 6-56 Description of sites and PADs within construction footprint following test excavations

AHIMS sites pre-test excavation	PAD as defined by desktop assessment	PAD as refined during excavations	Final site name	Comments
-	GWHAS01	GWHAS01	GWHAS01	Low density site confirmed through test excavation
-	GHW20-3	GHW20-3	GHW20-3	PAD confirmed through test excavation
45-4-1074 (GWH 11)	-	-	45-4-1074 (GWH 11)	Not assessed due to landowner access constraint
45-4-1075 (GWH 12)	-	-	45-4-1075 (GWH 12)	Not assessed due to landowner access constraints
45-4-1081 (GWH 18)	-	-	45-4-1081 (GWH 18)	No artefacts were discovered in sub-surface test excavations. Surface artefacts from original site card not relocated
45-4-1082 (GWH 19)	-	-	45-4-1082 (GWH 19)	No artefacts were discovered in sub-surface test excavations. Surface artefacts from original site card not relocated.
45-4-1084 (GWH 6)	-	-	45-4-1084 (GWH 6)	Low density site confirmed through test excavation
-	GWH20-2	GWH20-2	GWH20-2	Low density site confirmed through test excavation
45-4-1102 (GWH 29)	-	-	45-4-1102 (GWH 29)	No artefacts were discovered in sub-surface test excavations. Surface artefacts from original site card not relocated.

AHIMS sites pre-test excavation	PAD as defined by desktop assessment	PAD as refined during excavations	Final site name	Comments
45-4-1102 (GWH 31)	-	-	GWH 31	Site confirmed through test excavation
-	GWH20-1	N/A	N/A	No artefacts were discovered in test excavations in the PAD. As a result the PAD is not considered a site.
45-4-1095 (GWH35)	-	-	45-4-1095 (GWH35)	Low density site confirmed through test excavation
45-4-1097 (GWH 7)	-	-	45-4-1097 (GWH 7)	Incorporates hearth, PAD and artefact scatter
45-5-1099 (GWH 24)	-	-	45-5-1099 (GWH 24)	Scarred tree
45-4-1072 (GWH 9)	-	-	45-4-1072 (GWH 9)	Large sites and PAD areas with high cultural significance
45-4-1071 (GWH 8)	-	-	45-4-1071 (GWH 8)	Large sites and PAD areas with high cultural significance
-	River Lett Hill	N/A	N/A	No artefacts were discovered in test excavation in the PAD. As a result, the PAD is not considered a site
45-4-1106 (GWH 34)	-	-	45-4-1106 (GWH 34)	Not assessed due to landowner access constraints
45-4-1105 (GWH 33)	-	-	45-4-1105 (GWH 33)	Not assessed due to landowner access constraints
-	Robsons PAD 1	Robson site	Robson site	PAD confirmed through test excavation. Post contact site identified to the north of PAD extent (TBD (Forty Bends Contact Site))
-	Robsons PAD 2			
-	South Bowenfels Rural Fire Brigade PAD	South Bowenfels Rural Fire Brigade PAD	South Bowenfels Rural Fire Brigade Site	PAD confirmed through test excavation
-	Magpie Hollow Road PAD	Magpie Hollow Road PAD	Magpie Hollow Road Site	PAD confirmed through test excavation
Total				
14 registered sites	9 PADs	6 PADs	20 final sites (within construction footprint)	

Table 6-57 Description of sites and PADs within the study area (but outside the construction footprint) following test excavations

AHIMS sites pre-test excavation	PAD as defined by desktop assessment	PAD as refined during excavations	Final site name	Comments
45-4-0181 (Blackheath Cemetery)	-	-	45-4-0181 (Blackheath Cemetery)	
45-4-0935 (Hartley Historic Village)	-	-	45-4-0935 (Hatley Historic Site)	
45-4-0980 (SP 1)	-	-	45-4-0980 (SP 1)	
45-4-0993 (Lett River Jenolan Cave Road)	-	-	45-4-0993 (Lett River Jenolan Cave Road)	
45-4-1111 (GWH 42)	-	-	45-4-1111 (GWH 42)	Rockshelter located on the Bergofen Pass hiking trail
-	-	-	Forty Bends Contact Site	Post contact site was identified to the north of Robsons Site.
-	-	-	Hartley Grange 2	Not assessed due to landowner access constraints
-	GWHRS01	-	GWHRS01	Rock shelter with associated PAD
-	GWHST01	-	GWHST01	Scarred tree close to GWHRS01 with associated PAD
Total				
5 Registered sites	2 Sites			8 final sites, and 1 PAD within study area (but outside construction footprint)

Significance assessment

All Aboriginal objects in NSW are protected under the National Parks and Wildlife Act 1974. It is recognised that harm to Aboriginal sites may be necessary to allow other activities or developments to occur. In order for the consent authority to make informed decisions on such matters, an important element of cultural resource management is determining the significance of cultural heritage places and objects to understand what may be lost, and how best it can be mitigated.

Significance assessments for the Aboriginal sites identified during the archaeological within the construction footprint are presented below in Table 6-58. Significance assessments for Aboriginal sites identified outside of the construction footprint but within the study area are presented in Table 6-59. Significant assessments have not been completed for the five sites for which landowners did not permit access (refer to Table 6-56 and Table 6-57).

The assessment of significance is based upon a review of the similarities of sites within a culturally sensitive area. Where the site location has not been confirmed the significance could not be determined.

Further details of the specific criteria used to assess the significance are provided in Section 8 of Appendix G.

Table 6-58 Significance assessment for sites and PADs within the construction footprint

AHIMS ID	Site name	Social	Historic	Scientific	Aesthetic	Overall significance
-	GWH AS01	High	Low - moderate	Moderate	High	Moderate
-	GWH 20-3	High	Moderate	Moderate	High	Moderate-high
45-4-1081	GWH 18	High	Low	Low	Low	Low
45-4-1082	GWH 19	High	Low	Low	Low	Low
45-4-1099	GWH 24	High	High	Low	Low	Low
45-4-1081	GWH 06	High	Low	Low	Low	Low
-	GWH 20-2	High	High	Low	Low	Moderate
45-4-1074	GWH 11	No significance assessment undertaken due to access constraints				
45-4-1075	GWH 12	No significance assessment undertaken due to access constraints				
45-4-1102	GWH 29	High	Low	Low	Low	Low
45-4-1095	GWH 31	High	High	Moderate	Moderate	Moderate – high
45-4-1095	GWH 35	High	High	Low	Moderate	Low
45-4-1097	GWH 07	High	High	High	Moderate	High
45-4-1072	GWH 09	High	High	High	High	High
45-4-1071	GWH 08	High	High	High	High	High
45-4-1105	GWH 33	No significance assessment undertaken due to access constraints				
45-4-1106	GWH 34	No significance assessment undertaken due to access constraints				
-	Robson site	High	High	High	High	High
-	South Bowenfels Rural Fire Brigade Site	High	Low	Moderate	Low	Moderate
-	Magpie Hollow Road site	High	Low	Moderate	Low	Moderate

Table 6-59 Significance assessment sites and PADs within the study area (but outside the construction footprint)

AHIMS ID	Site name	Social	Historic	Scientific	Aesthetic	Overall significance
45-4-0181	Blackheath Cemetery	High	High	High	Low	Moderate
45-4-0935	Hartley Historic Village	High	High	Low	Low	Low

AHIMS ID	Site name	Social	Historic	Scientific	Aesthetic	Overall significance
45-4-0980	SP 1	High	Low	Moderate	Low	Moderate
-	GWHST01	High	Low	Low	Low	Moderate
45-4-0993	Lett River Jenolan Cave Road	High	Low	Low	Low	Low
-	Hartley Grange 2	No significance assessment undertaken due to access constraints				
45-4-1111	GWH 42	High	High	High	High	High
-	GWHR01	High	High	High	High	High
-	Forty Bends Contact Site	High	High	High	High	High

6.4.3 Potential impacts

Impacts to Aboriginal heritage sites

The potential impact of the proposal on Aboriginal heritage sites within the construction footprint are shown in Table 6-60. Potential impacts of the proposal on Aboriginal heritage sites outside of the construction footprint but within the study area are shown in Table 6-61. Most of the Aboriginal sites listed in Table 6-60 below consist of distributions of Aboriginal stone artefacts associated with PADS. These sites are expected to extend well into comparable landscapes outside of the construction footprint. For this reason, the degree of harm to sites whose boundaries likely extend beyond the construction footprint is listed as partial.

There are 20 Aboriginal sites within the construction footprint (one site is located in the central section of the Great Western Highway Program) that would be directly impacted. A further nine Aboriginal sites are located within the study area (but outside of the construction footprint), including two sites that may be subject to minor indirect impacts associated with vibration and settlement and one site that may be subject to moderate indirect impacts, also associated with vibration and settlement.

Further details of the specific criteria used to assess the potential impacts are provided in Section 9 of Appendix G.

Table 6-60 Impact assessment for PADs and Aboriginal sites within the proposed route corridor

Heritage item name (AHIMS ID)	Item type	Overall significance	Type of potential impact	Degree of harm	Significance of potential impact
GWHAS01	Stone artefact site	Low	Direct	Total	Minor
45-4-1105 (GWH 33)	Scarred tree	Low	Direct	Total	Negligible
45-4-1106 (GWH 34)	Artefact site	Moderate	Direct	Total	Minor
GWH 20-2	Site and PAD	Moderate	Direct	Partial	Moderate
45-4-1074 (GWH 11)	Site and PAD	Moderate	Direct	Partial	Moderate
45-4-1075 (GWH 12)	Site and PAD	Moderate	Direct	Partial	Moderate

Heritage item name (AHIMS ID)	Item type	Overall significance	Type of potential impact	Degree of harm	Significance of potential impact
45-4-1071 (GWH 08)	Artefact site	High	Direct	Partial	Moderate
45-4-1072 (GWH 09)	Artefact site	High	Direct	Partial	Major
45-4-1097 (GWH 07)	Stone artefact site, hearth	High	Direct	Total	Major
45-4-1095 (GWH 35)	Site and PAD	Moderate	Direct	Partial	Minor
45-4-1103 (GWH 31)	Stone artefact site	Moderate – high	Direct	Total	Moderate
45-4-1099 (GWH 24)	Scarred tree	Low	Direct	Total	Negligible
45-4-1081 (GWH 18)	Artefact site	Low	Direct	Total	Negligible
45-4-1082 (GWH 19)	Artefact site	Low	Direct	Total	Negligible
45-4-1084 (GWH 06)	Artefact site	Low	Direct	Partial	Negligible
GWH 20-3	Site and PAD	Moderate	Direct	Partial	Moderate
N/A	Site and PAD	High	Direct	Partial	Major
N/A	Site and PAD	Moderate	Direct	Partial	Moderate
N/A	Site and PAD	Moderate	Direct	Partial	Moderate

Table 6-61 Impact assessment for PADs and Aboriginal sites within the study area (but outside the construction footprint)

Heritage item name (AHIMS ID)	Item type	Overall significance	Type of potential impact	Degree of harm	Significance of potential impact
45-4-0181 (Blackheath Cemetery)	Site	Moderate	Indirect	None	Negligible
45-4-0935 (Hartley Historic Village)	Site	Low	Indirect	Partial	Negligible
45-4-0980 (SP 1)	Site	Moderate	Indirect	Partial	Negligible
GWHST01	Site	Moderate	Direct	Partial	Moderate
45-4-0993 (Lett River Jenolan Cave Road)	Site	Low	Indirect	Partial	Moderate
Hartley Grange 2	PAD	N/A	Direct	Partial	Moderate
45-4-1111 (GWH 42)	Rockshelter	High	Indirect	Partial	Minor
GWHR01	Rockshelter	High	Indirect	Partial	Moderate
Forty Bends Contact Site	Post contact site	High	Indirect	Partial	Minor

Impacts to Aboriginal cultural values

The cultural values assessment carried out for the proposal identified five areas of high cultural values based on cultural information collected during consultation, field surveys and consultation during the test excavation program. Aboriginal community members have stated the entire area within the proposal is significant to Aboriginal people, however knowledge holders have described key sites within the area that are of high importance with the potential to be impacted by the proposal:

- Cox River and River Lett Junction cultural place: Both rivers hold significant value to the Aboriginal community. The main concerns of knowledge holders were centered around the environmental impacts of the proposal.
- River Lett Hill (GWH 08 and GWH 09): Fieldwork conducted at GWH 08 and GWH 09 has unearthed what is reported to be a possum skin processing ground for the Wirajrudi People. Knowledge holders have expressed concerns with the disruption of this area, the site is of high social significance due to the belief that the site is the only known area that this practice would of have taken place. A knowledge holder also noted that that Country spanning the location of the possum skin processing site toward Coxs River may have also been a massacre site.
- Mount Victoria: It was noted that there is a large goanna rock art engraving (location not disclosed) that is highly significant due to the styles incorporated into the art. Further engagement with knowledge holders would be carried out to assess this goanna rock art engraving.
- Coxs River Valley: The Coxs River Valley is reported to have been the pathway in which the Gundungarra people would have traversed to attend ceremony and trade meetings.
- Great Western Highway: Knowledge holders reported the significance of the Great Western Highway as a songline and walking track for all Aboriginal people, and that it was a connector to other pathways such as Mount York and Bells Line of Road.

6.4.4 Safeguards and management measures

Table 6-62 Safeguards and management measures – Aboriginal heritage

No	Impact	Environmental safeguards	Responsibility	Timing	Reference	Locations
AH01	Aboriginal heritage management	An Aboriginal Heritage Management Plan (AHMP) will be developed in consultation with the RAPs to document standard procedures for: <ul style="list-style-type: none"> • Unexpected finds procedure for the discovery of Aboriginal ancestral remains, Aboriginal objects or new Aboriginal sites consistent with RMS (2015) Standard Management Procedures Unexpected Heritage Items 	Contractor / Transport	Prior to construction	Appendix G	N/A

No	Impact	Environmental safeguards	Responsibility	Timing	Reference	Locations
		<ul style="list-style-type: none"> • Detailed site salvage strategy • Management and curation of salvaged Aboriginal objects • Detailed locations and installations procedures for fencing and protective coverings • Details of permissible activities and permissible vehicle access inside protected Aboriginal areas • Heritage components of induction package for construction workers and supervisors • Any other heritage matters addressed in the Conditions of Approval for the proposal 				
AH0 2	Minimise impacts to Aboriginal heritage sites	<p>Detailed design will investigate opportunities to minimise impacts to:</p> <ul style="list-style-type: none"> • Forty Bends contact site • 45-4-1111 (GWH 42) • GWH RS01 	Contractor	Detailed design	Appendix G	River Lett to Forty Bends
AH0 3	Retention of sites located under elevated structures	<p>The feasibility of retaining portions of sites that are located under elevated structures (bridges) over River Lett and on River Lett Hill will be investigated as part of the detailed design process, including the following sites:</p> <ul style="list-style-type: none"> • 45-4-1097 (GWH 07) • 45-4-1072 (GWH 09) • Robsons Site • GWH 20-2 	Contractor	Detailed design	Appendix G	River Lett to Forty Bends

No	Impact	Environmental safeguards	Responsibility	Timing	Reference	Locations
AH0 4	Aboriginal cultural values interpretation	<p>Across the proposal, the following interpretation elements have been considered for design integration:</p> <ul style="list-style-type: none"> • Public works of art • Interpretive signage • Bridges • Earthworks • Plantings • Noise walls. 	Contractor	Detailed design	Appendix G	All
AH0 5	Impacts to Aboriginal heritage during construction	<p>Construction works will be closely confined to the minimum possible area required for construction activities. Haulage and other access roads will be designed and located to minimise potential disturbance of soils. Maximising the protection is particularly important in the zone within 100 m of creeks and may require covering the original cultural deposits in temporary protective barriers such as geotextile fabric and a layer of clean fill.</p>	Contractor	Detailed design	Appendix G	All
AH0 6	Impacts to Aboriginal heritage during construction	<p>Temporary fencing will be placed on the boundary of the following Aboriginal heritage sites:</p> <ul style="list-style-type: none"> • GWHAS01 • GWH 20-3 • GWH 20-2 • 45-4-1103 (GWH 31) • 45-4-1097 (GWH 7) • 45-4-1072 (GWH 9) • 45-4-1071 (GWH 8) • Robsons Site) • South Bowenfels Rural Fire Brigade Site 	Contractor	Prior to construction	Appendix G	All

No	Impact	Environmental safeguards	Responsibility	Timing	Reference	Locations
		<ul style="list-style-type: none"> • Magpie Hollow Road site • 45-4-1111 (GWH 42) 				
AH0 7	Community collection	<p>Salvage collection is warranted at those Aboriginal sites in the construction footprint where stone artefacts have been recorded on the surface. Salvage collection is to record MGA coordinates of each artefact by GPS and relevant artefact attributes consistent with the broader archaeological salvage analysis. The results of salvage collection should be collated in an Aboriginal Site Salvage Report (ASSR). Salvage collection will be undertaken by a suitably qualified archaeologist. Sites requiring salvage collection include:</p> <ul style="list-style-type: none"> • 45-4-1103 (GWH 31) • 45-4-1097 (GWH 7) • 45-4-1075 (GWH 12) • 45-4-1074 (GWH 11) • GWH 20-3. 	Contractor	Prior to construction	Appendix G	All
AH0 8	Salvage excavation	<p>Salvage excavation will be carried out by a suitably qualified archaeologist (refer to Section 1.6 of the Code of Practice) to define the western limit of artefact distribution in accordance with the requirements outlined in Section 10.2 of Appendix G for the following sites:</p> <ul style="list-style-type: none"> • GWH 20-2 • 45-4-1103 (GWH 31) • 45-4-1097 (GWH 7) • 45-4-1072 (GWH 9) 	Contractor	Prior to construction	Appendix G	All

No	Impact	Environmental safeguards	Responsibility	Timing	Reference	Locations
		<ul style="list-style-type: none"> • 45-4-1071 (GWH 8) • Robsons Site • South Bowenfels Rural Fire Brigade Site • Magpie Hollow Road site. 				
AH09	Aboriginal heritage sites	An Aboriginal Heritage Impact Permit (AHIP) will be required under Section 90 of the NP&W Act before any known Aboriginal heritage sites are impacted.	Transport	Prior to construction	Section 4.9 of QA G36 Environment Protection	N/A
AH09	Aboriginal heritage sites	Aboriginal site information recording forms (ASIRF) are to be completed for each site and submitted to OEHL to be updates on AHIMS.	Transport	Prior to construction	Appendix G	N/A
AH10	Unexpected finds	<p><i>The Standard Management Procedure - Unexpected Heritage Items</i> (Roads and Maritime, 2015) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where Transport does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place.</p> <p>Work will only recommence once the requirements of that Procedure have been satisfied.</p>	Contractor	Prior to construction, construction	Appendix G	All