

CHAPTER 19

Cultural Heritage

BORDER TO GOWRIE REVISED DRAFT ENVIRONMENTAL IMPACT STATEMENT

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19. Cultural Heritage

19.1 Scope of chapter

The purpose of this chapter is to assess the potential impacts of the Inland Rail—Border to Gowrie Project (the Project) on cultural heritage values within the cultural heritage impact assessment area (the impact assessment area) and to identify appropriate mitigation measures to address any impacts. The impact assessment area is defined in Section 19.3.2.

This chapter addresses the 'cultural heritage' section of the Terms of Reference (ToR) inclusive of ToR items 11.166 and 11.167. Appendix A2: Terms of Reference Cross-reference Table provides a cross reference for each of the ToR against relevant sections in the Environmental Impact Statement (EIS).

The objectives of this cultural heritage assessment are to:

- ▶ Identify known and potential cultural heritage values within the impact assessment area (Section 19.4)
- ▶ Assess the significance of these values (Section 19.5)
- ▶ Assess the Project's potential impacts on these values (Sections 19.5 and 19.7)
- ▶ Provide measures to manage or mitigate potential impacts on cultural heritage values (Section 19.6).

Aboriginal cultural heritage will be managed in accordance with a relevant approved Aboriginal Cultural Heritage Management Plan (CHMP) developed with the relevant Aboriginal Party in accordance with the cultural heritage duty of care requirements under the *Aboriginal Cultural Heritage Act 2003* (Qld) (ACH Act). Details of a CHMP are confidential to the signatories and are not provided within this chapter.

The relevant approved CHMP developed with the relevant Aboriginal Party will cover the construction of new rail infrastructure and associated structures for the Inland Rail Program. The CHMP will not extend to activities performed by Queensland Rail (QR). This chapter assesses impacts to cultural heritage values.

19.2 Regulatory environment

The legislation, policies, standards and guidelines that regulate and guide the cultural heritage assessment are identified and summarised in Table 19-1.

The Commonwealth and State legislation applicable to the Project are also discussed in Chapter 3: Legislation and Project Approvals Process.

TABLE 19-1 CULTURAL HERITAGE REGULATORY CONTEXT

| Legislation, policy and guidelines | Relevance to the Project |
|---|---|
| Commonwealth | |
| <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) | <ul style="list-style-type: none">▶ Protects matters of national environmental significance (MNES), which include Aboriginal and historic heritage▶ Establishes and protects places on the world, national and Commonwealth heritage lists▶ There are no heritage MNES or world-, national- or Commonwealth- listed places of relevance to the Project. |
| <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> (Cth) | <p>Enables the Australian Government to intervene and, where necessary, preserve and protect areas and objects of particular significance to Aboriginal persons or group of persons from being desecrated or injured. The <i>Aboriginal and Torres Strait Islander Heritage Protection Act</i> (Cth) defines Aboriginal to mean a member of the Aboriginal race of Australia, and includes a descendant of the Indigenous inhabitants of the Torres Strait Islands and, therefore, seeks to protect both Aboriginal and Torres Strait Islander heritage.</p> <ul style="list-style-type: none">▶ Provides additional heritage protection where State-based protections are perceived to be inadequate▶ Allows the Australia Minister for the Environment, on the application of an Aboriginal person or group of Aboriginal persons to make a declaration to protect an area, object or class of objects that are significant in Aboriginal tradition, from injury or desecration.▶ Unlikely to be triggered providing works proceed in accordance with an approved CHMP. |

| Legislation, policy and guidelines | Relevance to the Project |
|---|---|
| <i>Native Title Act 1993</i> (Cth) (NT Act) | <p>Where the Project footprint uses existing rail corridors that were established by or on behalf of the Crown or a statutory authority of the Crown on or before 23 December 1996, native title rights have been extinguished through the establishment of these public works.</p> <p>If the Project is undertaken over land where native title has been extinguished, there are no requirements to comply with the NT Act.</p> <p>Elsewhere, the Project footprint traverses properties where native title has not been extinguished including reserves, watercourses, State land and two State forests. The granting of any statutory approvals, or of land tenure, for the Project in relation to these properties where native title continues to exist will be 'future acts'. As such, they will be valid if they are covered by a provision within Part 2, Division 3 of the NT Act and invalid, if not.</p> |
| State | |
| <i>Queensland Heritage Act 1992</i> (Qld) (QH Act) | <ul style="list-style-type: none"> Principal State legislation that protects non-Aboriginal heritage Items of importance to the people of Queensland are nominated for State Heritage Listing Allows for the protection of items of local heritage significance in a local government register Protects historical archaeological discoveries that may be an important source of information about an aspect of Queensland's history No State heritage places or known archaeological places of State heritage value are of relevance to the Project. |
| <i>Aboriginal Cultural Heritage Act 2003</i> (Qld) (ACH Act) | <ul style="list-style-type: none"> Principal piece of State legislation that protects Aboriginal cultural heritage Seeks to provide effective recognition, protection and conservation of Aboriginal cultural heritage Requires that every person who carries out an activity 'take all reasonable and practical measures to ensure the activity does not harm Aboriginal cultural heritage (the cultural heritage duty of care)' Establishes a database of reported Aboriginal cultural heritage places but does not guarantee that the 'information is up-to-date, comprehensive or otherwise accurate' Mandates the development and approval of a CHMP for any project requiring an EIS Confirms that acting under a relevant approved CHMP developed with the relevant Aboriginal Party will ensure compliance with the cultural heritage duty of care in relation to Aboriginal cultural heritage covered by the CHMP. |
| <i>Coroners Act 2003</i> (Qld) | <ul style="list-style-type: none"> Provides for the management of Unexpected Human Remains including reporting and establishing procedures for the investigation of particular deaths. |
| <i>Human Rights Act 2019</i> | <ul style="list-style-type: none"> It supports the protection of Aboriginal cultural heritage values in the Project area, as provided in complementary legislation. |
| Cultural heritage planning frameworks, strategies and statutory guidelines | |
| <i>Toowoomba Regional Planning Scheme</i> (Version 26) (Toowoomba Regional Council (TRC), 2012) | <ul style="list-style-type: none"> Queensland legislation requires all local government areas (LGA) to: <ul style="list-style-type: none"> identify places of local cultural heritage significance in a planning scheme or a local heritage register develop provisions for the management of such heritage. |
| <i>Goondiwindi Region Planning Scheme 2018</i> (Version 2) (Goondiwindi Regional Council (GRC), 2018a) | <ul style="list-style-type: none"> Both the Toowoomba and Goondiwindi LGAs have a local heritage register within their respective planning schemes There are a number of local heritage register places or places of local heritage value of relevance to the Project. |
| <i>Guidance on Heritage Impact Assessments for Cultural World Heritage Properties</i> (International Council on Monuments and Sites (ICOMOS), 2011) | This document was prepared by the ICOMOS, the peak professional body working for the conservation of cultural heritage places and provides a comprehensive method for assessing impacts at all types of heritage places. |
| <i>The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance</i> (ICOMOS (Australia), 2013) | This is an internationally adopted standard for heritage conservation practice that underpins the assessment of heritage significance in both State and local instruments and informs the management and mitigation measures to be implemented for the Project. |

| Legislation, policy and guidelines | Relevance to the Project |
|--|---|
| <i>Assessing cultural heritage significance: Using the cultural heritage criteria</i> (Department of Environment and Heritage Protection (DEHP), 2013a) | This document was prepared by the former Department of Environment and Heritage Protection (now the Department of Environment, Science and Innovation (DESI)) to provide guidance on applying the QH Act criteria to significance assessments of State and local heritage places. |
| <i>Aboriginal Cultural Heritage Act 2003: Cultural Heritage Management Plan Guidelines</i> (Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP), 2005) | This document was prepared by the former DATSIP (now Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts (DTATSIPCA)) to provide guidance on the development of a CHMP. |
| <i>Aboriginal Cultural Heritage Act 2003—Duty of Care Guidelines</i> (DATSIP, 2004) | <ul style="list-style-type: none"> ▶ Document prepared by the former DATSIP and gazetted under the ACH Act ▶ Provides guidance on meeting the Aboriginal cultural heritage 'duty of care' as defined under Section 23 of the ACH Act ▶ Recommends preparation of a CHMP for works that may impact Aboriginal heritage. |

19.3 Methodology

19.3.1 Forms of heritage impacts

This assessment considers two types of potential impacts on cultural heritage values:

- ▶ Direct impacts: occur if a cultural heritage place or site is located directly in a development area and/or would be physically impacted by development. Such impacts include the demolition or substantial alteration of a building, or the disturbance of an archaeological site.
- ▶ Indirect impacts: alter the surrounding physical environment in such a way that a cultural heritage place or site is affected. Indirect impacts may include an increase in vibration from construction activities that results in physical damage to heritage places. Changes to the environment may also indirectly impact heritage values by altering the setting of a heritage place.

19.3.2 Impact assessment area

For the purposes of this assessment, locations of potential Aboriginal and non-Aboriginal heritage interests have been identified within a 1 kilometre (km) radius of the Project footprint to provide an appreciation of the creation and evolution of the historical landscape in which the Project is located.

Impacts have then been assessed for non-Indigenous heritage places within 50 metres (m) of all land required to accommodate permanent and temporary components of the Project (Project footprint) (Figure 19-1). This non-Indigenous cultural heritage impact assessment area allows for consideration of potential direct impacts within the Project footprint and indirect impacts to heritage places within 50 m of the Project (Section 19.3.4.4 for further discussion).

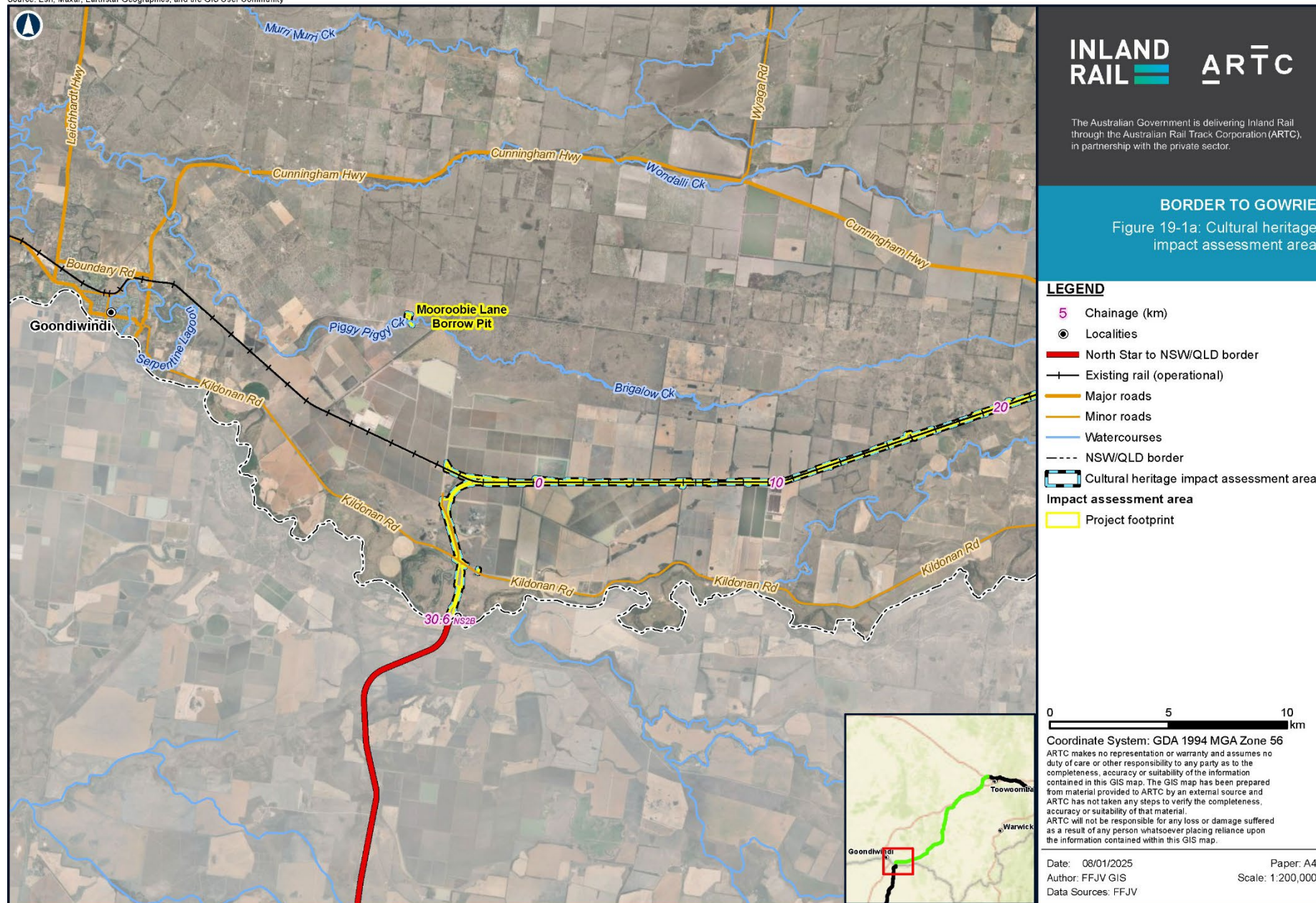
The impact assessment area for Aboriginal heritage has been determined through engagement with the relevant Aboriginal Parties (Section 19.3.3).

19.3.3 Aboriginal cultural heritage

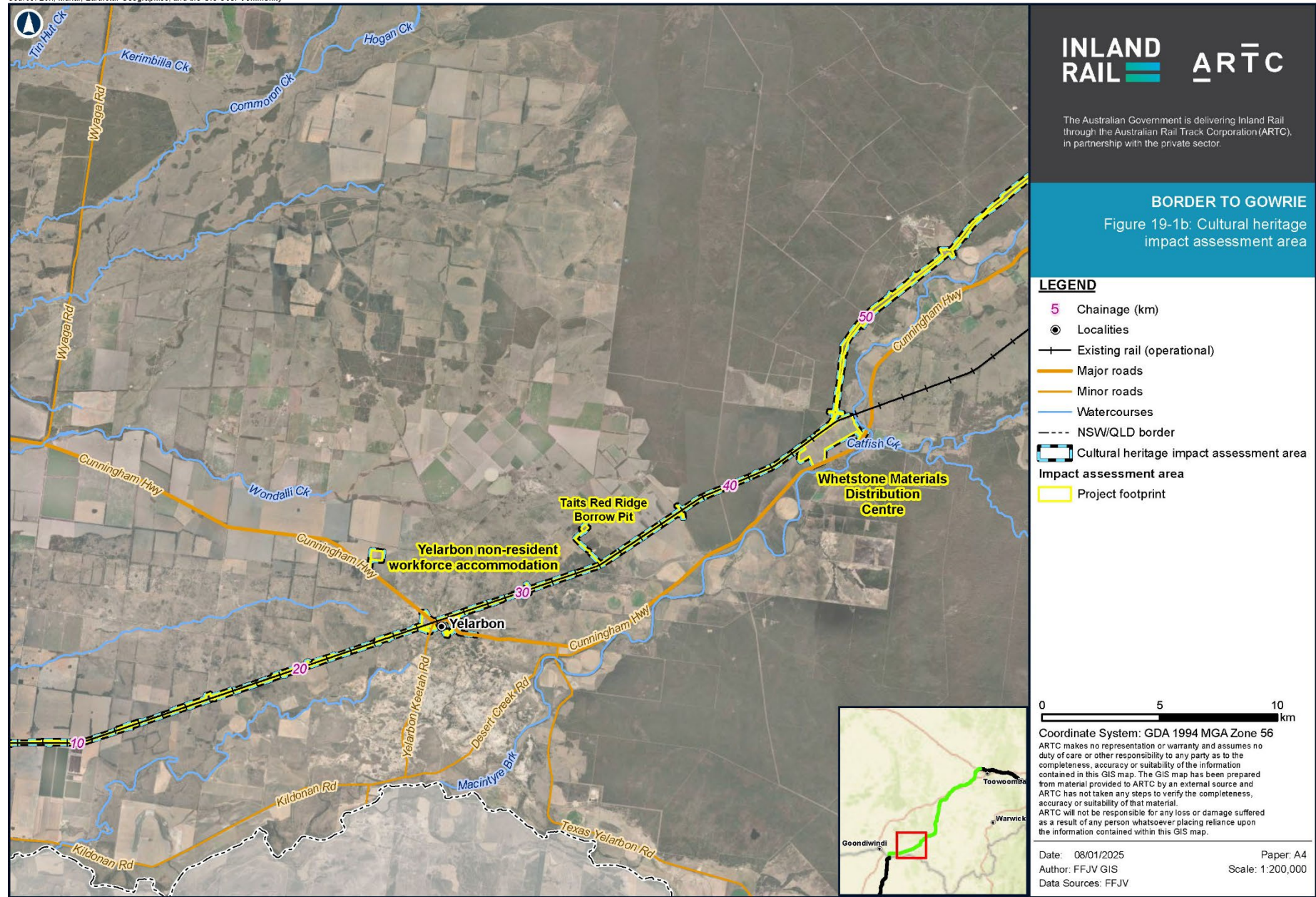
Aboriginal cultural heritage on the Project is managed as part of the process to negotiate a relevant approved CHMP developed with the relevant Aboriginal Party for the Project footprint and in accordance with the requirements of Part 7 of the ACH Act and the Cultural Heritage Management Plan Guidelines (DATSIP, 2005). As part of the CHMP negotiation process undertaken to date, ARTC has engaged with the relevant Aboriginal Parties to identify methods for investigating Aboriginal cultural heritage that may be affected by the Project. Such methods include undertaking detailed surveys of the Project footprint to identify significant Aboriginal objects, significant Aboriginal areas or evidence of archaeological or historic significance of Aboriginal occupation of an area. Where identified, objects or areas of significance will be managed in accordance with a relevant approved CHMP developed with the relevant Aboriginal Party in accordance with the cultural heritage duty of care requirements of Section 23 of the ACH Act.

A search of the Queensland Government's Aboriginal and Torres Strait Islander Cultural Heritage Database and Register was undertaken on 15 November 2023 (Search ID 148070) to identify:

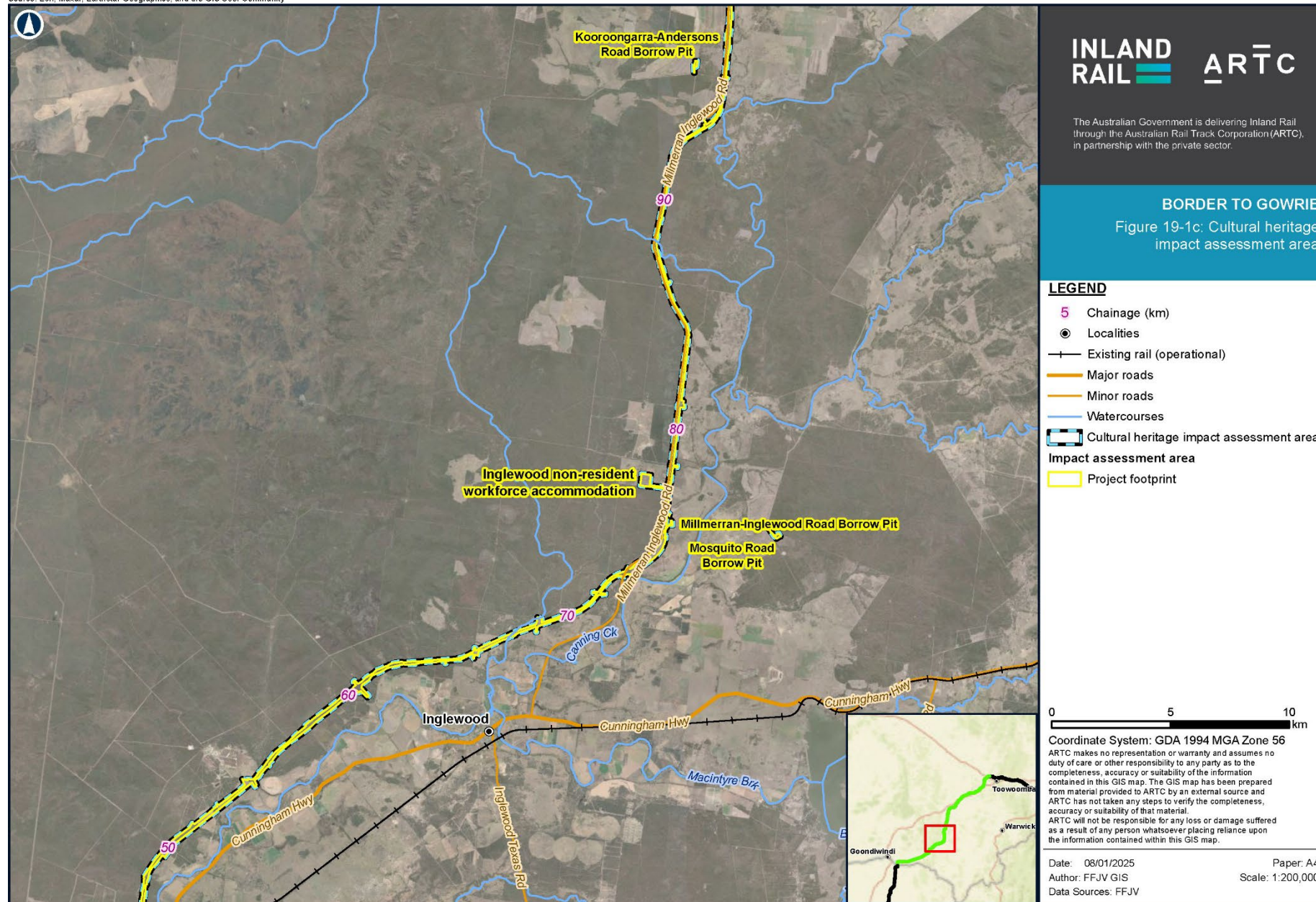
- ▶ Aboriginal Party or Parties and/or cultural heritage bodies for the Project
- ▶ Any registered Aboriginal cultural heritage within 1 km of the Project.



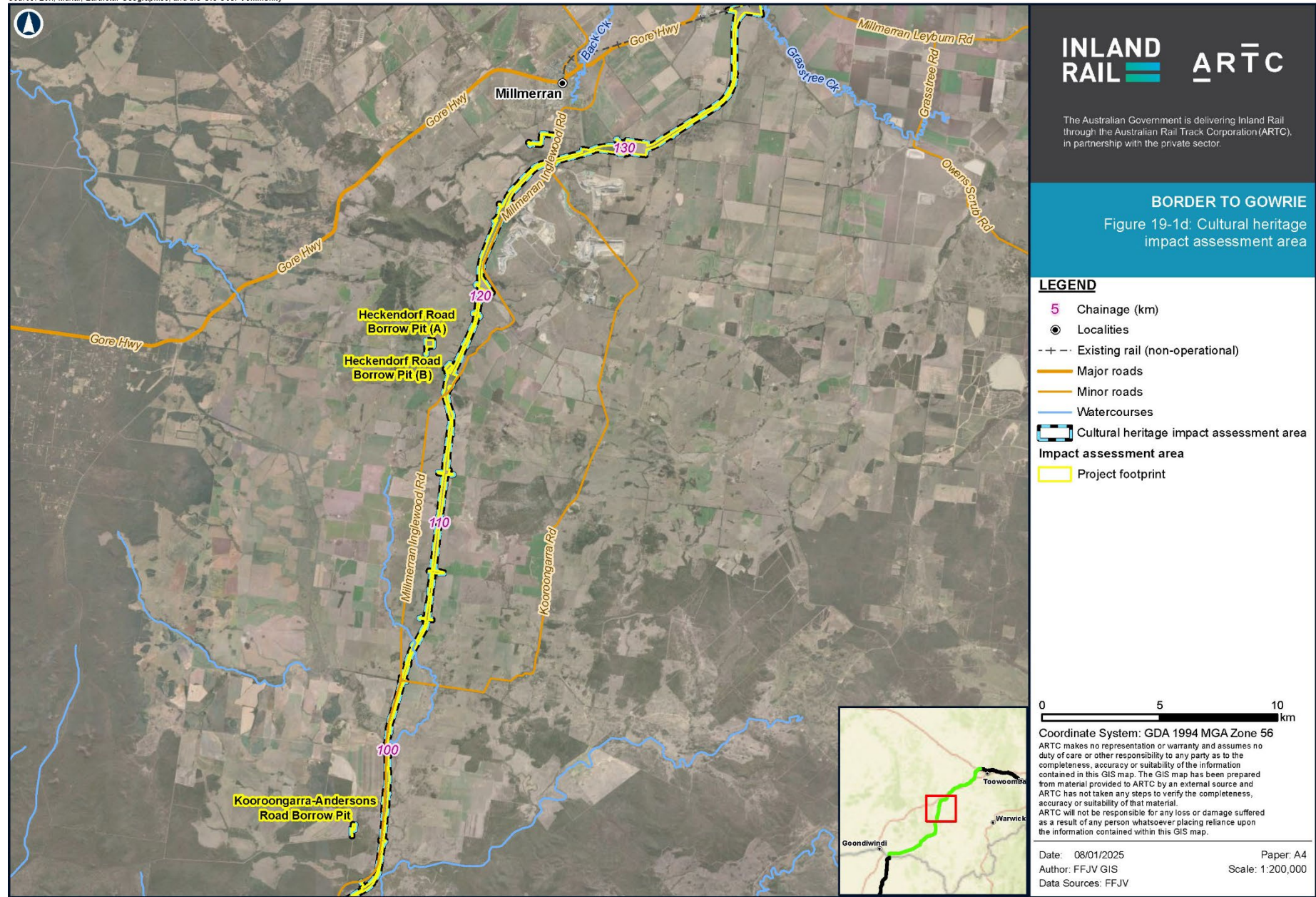
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



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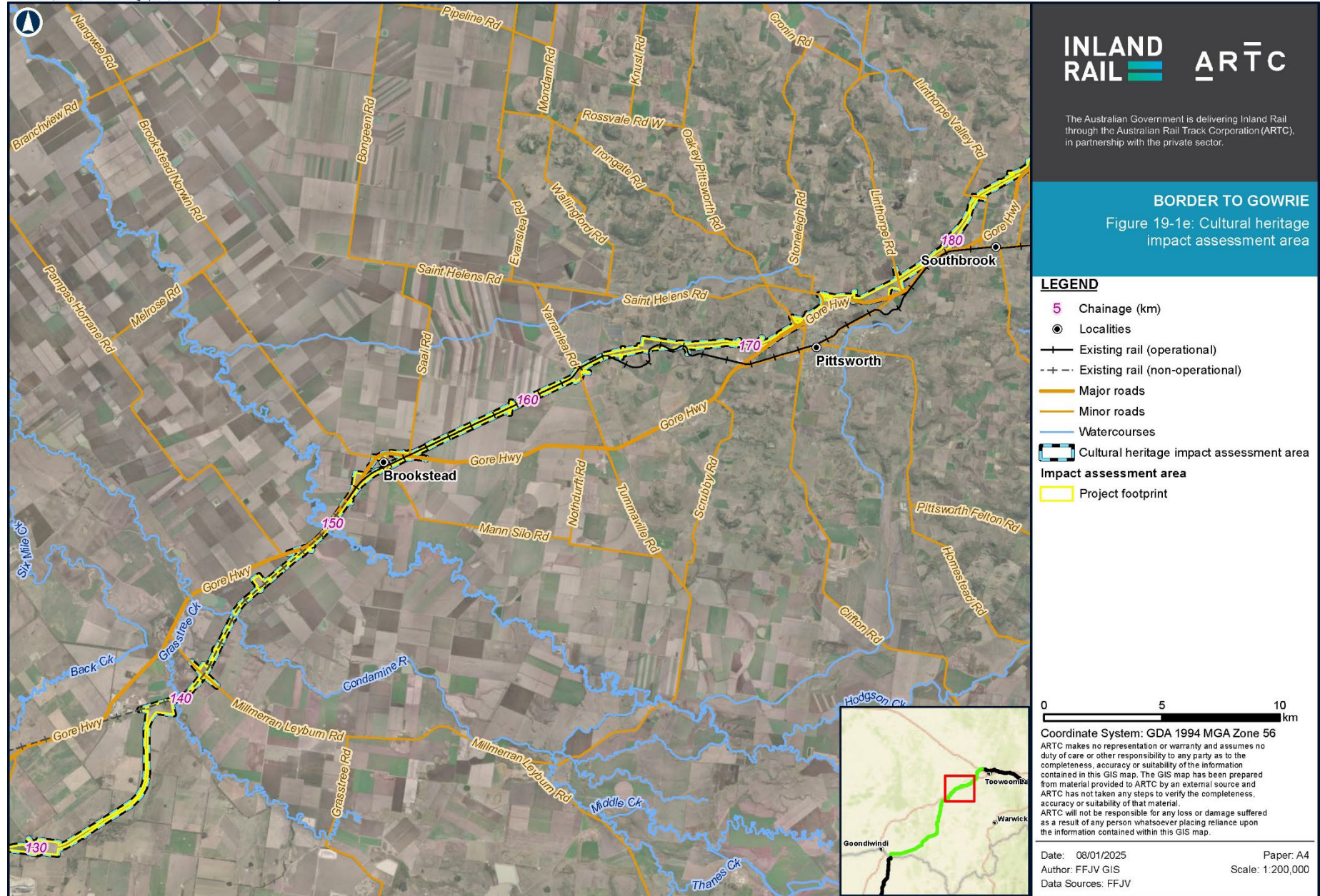


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

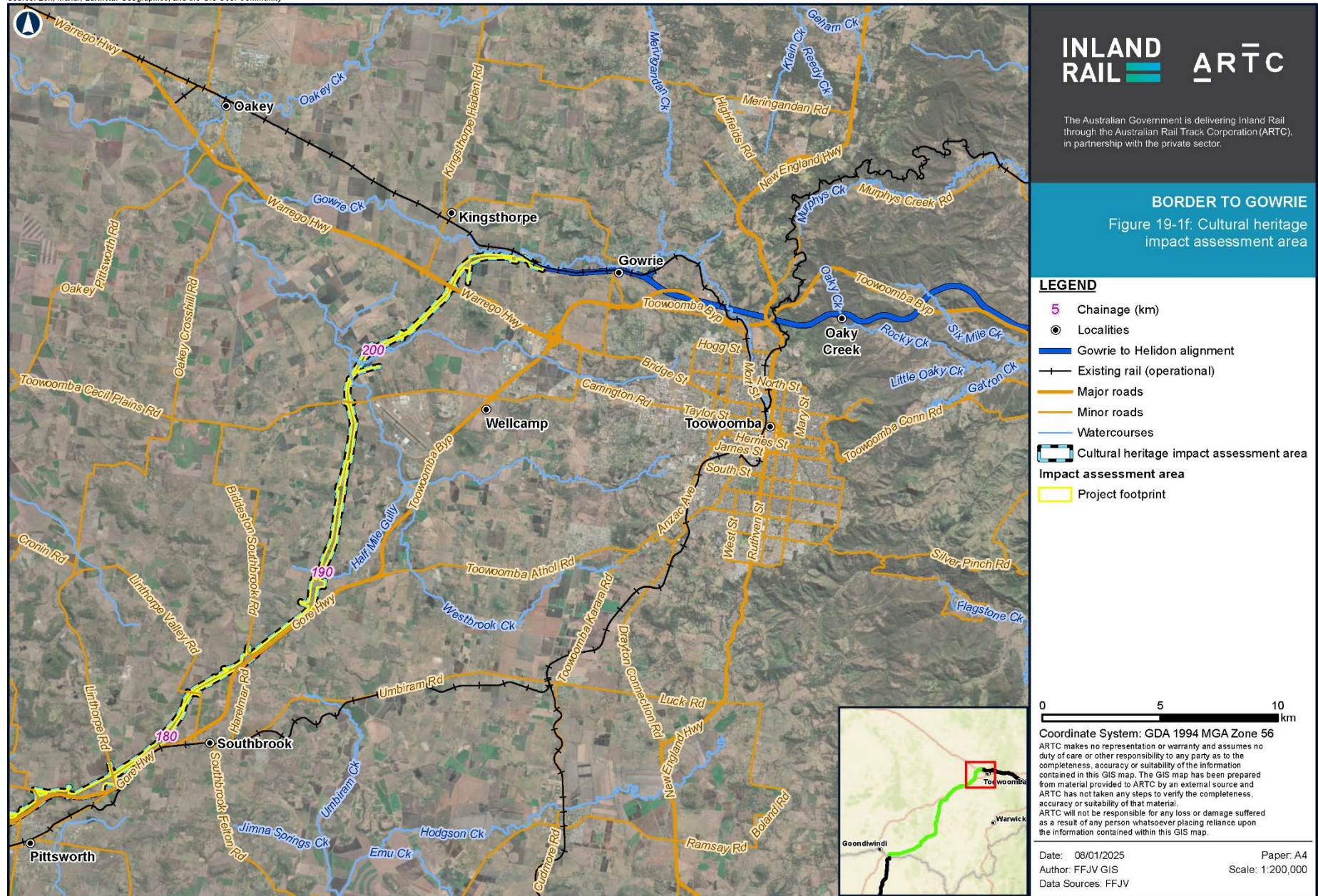


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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



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19.3.4 Non-Aboriginal heritage

The historical (non-Aboriginal) heritage assessment was undertaken to address legislative requirements, the Coordinator-General's additional information requirements and the guideline *Assessing cultural heritage significance: Using the cultural heritage criteria* (DEHP, 2013b), which provides a framework for identifying and managing historical significance under the QH Act. In keeping with this framework, the key elements of the assessment were:

- ▶ Background research including searches of statutory and non-statutory registers
- ▶ Non-Aboriginal cultural heritage site inspections
- ▶ Significance assessment of heritage sites
- ▶ Impact assessment of heritage sites
- ▶ Defining management measures.

More detail on the methodology of the non-Aboriginal heritage assessment is provided in Appendix Z: Non-Aboriginal Cultural Heritage Survey Report.

19.3.4.1 Background research

Background research carried out to inform the assessment of potential non-Aboriginal heritage impacts consisted of:

- ▶ Review of the relevant Commonwealth, Queensland and local heritage registers to identify previously registered heritage and archaeological sites within 1 km of the Project footprint, including:
 - ▶ World Heritage List
 - ▶ National Heritage List
 - ▶ Commonwealth Heritage List
 - ▶ Register of the National Estate (non-statutory)
 - ▶ Queensland Heritage Register
 - ▶ Toowoomba Regional Planning Scheme (Local Heritage Register) (TRC, 2012)
 - ▶ Goondiwindi Region Planning Scheme 2018 (Local Heritage Register) (GRC, 2018a)
 - ▶ QR Heritage Register
 - ▶ Queensland World War II Historic Places (non-statutory)
 - ▶ Monument Australia (non-statutory)
 - ▶ DESI Cultural Heritage Information Management System (non-statutory).
- ▶ Collation and review of relevant previous heritage assessments and documents held by State and national repositories, such as the State Library of Queensland, Queensland State Archives and National Archives of Australia
- ▶ Examination and review of current and historical mapping and aerial imagery relevant to the impact assessment area.

19.3.4.2 Assessment strategy

Given the extent of the Project, it was not considered practical to inspect the entire Project footprint. Instead, a targeted survey strategy was adopted to focus on areas of highest heritage potential. These areas of interest (AOI) included:

- ▶ Registered heritage places (statutory and non-statutory)
- ▶ Previously identified but unregistered places
- ▶ New places identified during historical research or site inspections.

The inspection of AOI was prioritised based on the proximity of a place to the Project footprint (whether or not they are in the impact assessment area) and their heritage potential (high, medium or low). The AOI of high heritage potential included known heritage places, as well as sites that may contain rare, early or complex elements, such as slab huts, homesteads or major rail infrastructure. Alternatively, AOI of low heritage potential contained common, late or simple elements, such as post-war houses or small, utilitarian elements of infrastructure. Consequently, surveys included railway stations and major bridges, which have the greatest potential to be of heritage value, but did not include every low point or potential culvert location, which have relatively little potential to be of heritage value. Mitigation measures for managing heritage impacts in areas that have not been surveyed are outlined in Section 19.6.

By applying these criteria, 41 AOI were identified for inspection (Table 19-2). Land access approval was obtained for 22 of the 41 identified AOI and each was inspected. For sites that could not be accessed, most were viewed from public areas. Where this was not possible, a conservative assessment was made based on historical evidence.

The AOI have been named following the site or object naming convention with Project acronym, year recorded and site type acronym with sequential number (e.g. B2G-19-H01).

TABLE 19-2 AREAS OF INTEREST WITHIN THE IMPACT ASSESSMENT AREA IDENTIFIED FOR ASSESSMENT

| Site ID | Description | Site location (lot/plan) | Assessment type |
|------------|--|--|-----------------|
| B2G-19-H01 | Kurumbul Station | Lot 481 on SP119198 | Site inspection |
| B2G-19-H02 | Gibinbell shearing complex | Lot 31 on MH567 | Site viewing |
| B2G-19-H03 | Gibinbell siding | Lot 413 on SP119197 | Site inspection |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | Lot 106 on Y5691 | Site viewing |
| B2G-19-H05 | ANZAC Memorial Garden | Lot 107 on Y5691 | Site inspection |
| B2G-19-H06 | Cancer charity tree | Taloom Street, Yelarbon | Site inspection |
| B2G-19-H07 | Church (former) | Lot 2 on RP120829 | Site viewing |
| B2G-19-H08 | Yelarbon Mill 1 | Lot 1 on RP62008 | Site viewing |
| B2G-19-H09 | Yelarbon Mill 2 | Lot 99 on SP222802 | Site inspection |
| B2G-19-H10 | Petrol station | Lot 8 on Y56911 Lot 9 on Y56911 Lot 10 on Y56911 | Site inspection |
| B2G-19-H11 | Yelarbon railway complex | Lot 20 on SP120712 Lot 21 on SP120712 | Site inspection |
| B2G-19-H12 | Tree trunk | Lot 110 on SP171826 | Site inspection |
| B2G-19-H13 | Whetstone siding | Lot 352 on SP116434 | Site inspection |
| B2G-19-H14 | Homestead complex | Lot 511 on RP226715 | Site viewing |
| B2G-19-H15 | Homestead complex | Lot 107 on MH808 | Site viewing |
| B2G-19-H16 | Structure | 1 Lot 69 on MH786 | Site viewing |
| B2G-19-H17 | Sheds | Lot 37 on MH523 | Site viewing |
| B2G-19-H18 | Lookout | Lot 4 on SP126840 | Site inspection |
| B2G-19-H20 | Grass Tree Creek Rail bridge | Lot 4 on RP16058 | Site inspection |
| B2G-19-H21 | Yandilla Station | Lot 202 on SP124721 | Site inspection |
| B2G-19-H22 | Protest public art | Lot 2 on RP61876 | Site viewing |
| B2G-19-H23 | Condamine River bridge | Lot 114 on SP113906 | Site inspection |
| B2G-19-H24 | Pampas Station | Lot 23 on SP124720 | Site inspection |
| B2G-19-H25 | Pampas Memorial Hall | Lot 84 on SP109985 | Site inspection |
| B2G-19-H26 | Sheds | Lot 1 on RP14242 | Site viewing |
| B2G-19-H27 | Condamine River bridge 2 | Lot 2 on RP37132 | Site inspection |
| B2G-19-H28 | Brookstead Station | Lot 121 on SP104977 | Site inspection |
| B2G-19-H29 | Brookstead Station building (relocated) | Lot 13 on SP112652 | Site inspection |
| B2G-19-H30 | Cecilvale Station | Lot 2 on RP14245 | Site inspection |
| B2G-19-H31 | Yarranlea Station | Lot 53 on SP112651 | Site inspection |
| B2G-19-H32 | Murlaggan Station | Lot 2 on RP7479 | Site inspection |
| B2G-19-H33 | Homestead complex | Lot 1 on RP7470 | Site viewing |
| B2G-19-H34 | Archaeological site | Lot 11 on SP285307 | Site viewing |
| B2G-21-H02 | Yelarbon Cemetery | Lot 16 on MH288 | Desktop review |
| B2G-21-H03 | Avonlea homestead complex | Lot 109 on DY241 | Desktop review |
| B2G-21-H04 | Multiple structures | Lot 20 on SP254028 | Desktop review |
| B2G-21-H09 | Brookstead Hotel | Lot 141 on RP14234 | Desktop review |
| B2G-21-H10 | House and windmill complex | Lot 3822 on A341940 | Desktop review |
| B2G-21-H12 | Shed | Lot 2 on RP182048 | Desktop review |
| B2G-21-H13 | Green Hills Hotel complex | Lot 1789 on A34919 Lot 2718 on A341307 | Site inspection |
| B2G-21-H14 | Fairvale homestead complex | Lot 2 on RP110779 | Desktop review |

19.3.4.3 Significance assessment

The significance of historical heritage places has been assessed in accordance with the QH Act and *Assessing cultural heritage significance: Using the cultural heritage criteria* (DEHP, 2013b). In general, a place may be considered to be of heritage significance if it satisfies one or more of the criteria stipulated in Section 35 of the QH Act, as outlined in Table 19-3.

TABLE 19-3 QUEENSLAND STATE HERITAGE SIGNIFICANCE ASSESSMENT CRITERIA

| Criteria | Description |
|----------------------|---|
| A—Historical | The place is important in demonstrating the evolution or pattern of Queensland's history |
| B—Rarity | The place demonstrates rare, uncommon or endangered aspects of Queensland's cultural heritage |
| C—Research | The place has potential to yield information that will contribute to an understanding of Queensland's history |
| D—Representativeness | The place is important in demonstrating the principal characteristics of a particular class of cultural places |
| E—Aesthetic | The place is important because of its aesthetic significance |
| F—Creative/technical | The place is important in demonstrating a high degree of creative or technical achievement at a particular period |
| G—Social | The place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons |
| H—Associational | The place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history |

These criteria may be fulfilled at different significance thresholds, ranging from 'world' to 'local', depending on the importance of the place and the contribution it makes to our understanding of the past. Descriptions of the applicable significance thresholds, as defined in *Assessing cultural heritage significance: Using the cultural heritage criteria* (DEHP, 2013b), are outlined in Table 19-4.

TABLE 19-4 LEVELS OF CULTURAL HERITAGE SIGNIFICANCE THRESHOLDS

| Cultural heritage significance thresholds | Description |
|---|--|
| World | Heritage values contribute to our understanding of the pattern and evolution of world history and heritage and the place is considered to be of outstanding value to humanity |
| National | Heritage values make an outstanding contribution to our understanding of the pattern and evolution of Australia's history and heritage |
| State | Heritage values contribute to our understanding of the wider pattern and evolution of Queensland's history and heritage. This includes places that contribute significantly to our understanding of the regional pattern and development of Queensland |
| Local | Heritage values contribute to our understanding of the pattern and evolution of local history and heritage |

19.3.4.4 Indirect impacts

Project works may result in indirect physical impact on heritage places through two main mechanisms:

1. Noise and vibration from construction works and operations stages
2. Increased flood risk through changes to hydrology.

Noise and vibration

Potential noise and vibration impacts have been assessed on the basis of *DIN 4150-3:1999 Structural vibration—Effects of vibration on structures* (Deutsches Institut für Normung, 1999), which provides guideline vibration levels to minimise the risk of structural damage to property and buildings. This standard suggests the highest potential levels of vibration may be experienced within 50 m of the vibration-causing activity. Consequently, noise and vibration modelling has been carried out for all places within 50 m of the Project footprint to ascertain typical worst-case impacts and develop reasonable and practicable measures to mitigate these impacts. Further information can be found in Chapter 16: Noise and Vibration.

It is possible that exceedances of acceptable vibration levels will occur beyond this 50 m area, due to local conditions or construction methodology. To capture any additional impacts, further heritage survey and vibration modelling will be conducted during the detailed design stage and prior to the commencement of vibration-causing construction activities (Section 19.6). During detailed design, the buffer will be extended from 50 m to 150 m.

Flooding

Potential flood impacts have been assessed for all heritage places within 50 m of the Project footprint using standard hydrological models (Chapter 14: Flooding and Geomorphology). These models consider whether Project works will increase the flood risk above that which already exists. This risk is measured three ways:

- ▶ Peak water level—measured in metres. An increase in the depth of flooding increases the risk that buildings may be inundated
- ▶ Time of inundation—measured in hours. An increase in the time an area is inundated increases the risk that fabric is damaged
- ▶ Velocity of water—measured as metres per second (m/s). An increase in water velocity increases the chance that flooding will undermine structures or disturb archaeological deposits.

19.3.4.5 Impact assessment methodology

The potential impacts on the heritage values have been assessed using criteria developed from the *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS, 2011), in combination with the standard impact assessment methodology adopted for the Project (Chapter 4: Assessment Methodology).

Under the ICOMOS guidelines, two key elements are required to assess impacts on heritage places: the value of the place, and the extent of the change to this value. The value of the place is a measure of its importance, also referred to as its significance. As outlined in the Burra Charter (ICOMOS (Australia), 2013) and Section 19.3.4.3, places can be of local, State, national or world significance. Places of local significance are important only to their immediate community. Places of State significance are important to the wider region and places of national significance are important to the country as a whole. Places of world heritage significance are important to all of humanity, possessing one or more outstanding universal values. The more valuable a place is, the more vulnerable it is to change. Therefore, value, or significance as it is used here, is a measure of sensitivity. The differing significance of a place and its associated sensitivity to impact is summarised in Table 19-5.

TABLE 19-5 LEVELS OF CULTURAL HERITAGE SENSITIVITY

| Sensitivity | Justification | Significance |
|-------------|--|--|
| Extreme | Attributes that convey outstanding universal values of a world heritage place | Fulfils criteria for local, State, national and international listing |
| Very high | Exceptional, rare or outstanding attributes demonstrating important themes in national or international history and heritage | Fulfils criteria for local, State, national or potentially international listing |
| High | Attributes demonstrating important themes in State history and heritage | Fulfils criteria for local and State listing |
| Moderate | Attributes demonstrating important themes in local history and heritage | Fulfils criteria for local listing and may fulfil criteria for state listing |
| Low | Attributes demonstrating minor themes in local history and heritage | May fulfil criteria for local listing and does not fulfil criteria for State listing |
| Negligible | Attributes that have no heritage significance | Does not fulfil criteria for local or State listing |

Source: Adapted from ICOMOS (2011): Appendix 3A

The degree of impact an activity will have on a heritage place is assessed in terms of the magnitude of change to the acknowledged heritage values of a place as summarised in Table 19-6. These impacts may be direct, such as the demolition of heritage buildings, or indirect, such as changes to the views or setting of a heritage place. In some cases, indirect impacts might also cause physical damage to a heritage place, such as excessive vibration causing structural damage, or excessive pollution causing damage to surfaces.

TABLE 19-6 DETERMINING MAGNITUDE OF CHANGE

| Magnitude | Example criteria |
|------------|--|
| Major | Change to all or most significant aspects of the place, such that its heritage values are substantially reduced or destroyed |
| Medium | Change to some significant aspects of the place, such that some of its heritage values are partially reduced |
| Low | Minor change to significant aspects of the place, such that some of its heritage values are slightly reduced |
| Negligible | Changes to insignificant aspects of the places, such that its heritage values are not reduced |
| No change | No change |

Source: Adapted from ICOMOS (2011): Appendix 3B

The final assessment of the significance of impact on a heritage place is a factor of the cultural heritage sensitivity of the place, combined with the predicted magnitude of change, as outlined in Table 19-7. A prediction of impact significance can be made both before and after the implementation of identified mitigation measures, allowing the efficacy of the measures to be assessed and revealing residual impacts that need to be considered.

TABLE 19-7 IMPACT SIGNIFICANCE MATRIX

| Significance of impact | | Magnitude of change | | | |
|-------------------------------|------------|---------------------|----------|------------|-----------|
| Cultural heritage sensitivity | Major | Medium | Low | Negligible | No change |
| Extreme | Very large | Large | Moderate | Slight | Neutral |
| Very high | Very large | Large | Moderate | Slight | Neutral |
| High | Large | Moderate | Moderate | Slight | Neutral |
| Moderate | Moderate | Moderate | Slight | Slight | Neutral |
| Low | Moderate | Slight | Slight | Neutral | Neutral |
| Negligible | Slight | Slight | Neutral | Neutral | Neutral |

Source: Adapted from ICOMOS (2011): Section 5

19.3.5 Consultation

This section provides a summary of the consultation that has been undertaken with regulatory agencies, Aboriginal Parties, landowners and local community groups to inform the cultural heritage and social impact assessments for the Project (Chapter 17: Social). Information from all these discussions have been integrated into this assessment.

19.3.5.1 Agency consultation

The approach adopted for the purpose of cultural heritage assessment was presented to and discussed with representatives from State government agencies, including DESI, on 9 October 2019. The assessment method for cultural heritage assessment had previously been presented at the TRC EIS forum on 3 September 2019 (in addition to assessment methods for other disciplines) in response to a specific request from TRC.

19.3.5.2 Aboriginal heritage consultation

Aboriginal community consultation acknowledges the right of Aboriginal Parties associated with the area to be involved, through direct participation, on matters that directly affect their heritage. Involving Aboriginal Parties in all facets of the assessment process ensures that they are given adequate opportunity to share information about cultural values, and to actively participate in the development of appropriate management and/or mitigation measures. The successful identification, assessment and management of Aboriginal cultural heritage values are dependent on an inclusive and transparent consultation process.

Consultation with the local Aboriginal community is ongoing in accordance with DATSIP's (now DTATSIPCA) *Cultural Heritage Management Plan Guidelines* (DATSIP, 2005). Consultation has included CHMP negotiations with the aim of identifying:

- ▶ A process for undertaking cultural heritage surveys for the Project
- ▶ A process for including the relevant Aboriginal Parties, associated with the area, in assessing Aboriginal cultural heritage values and the protection and management of Aboriginal cultural heritage
- ▶ A process for mitigating, managing and protecting identified cultural heritage and sites during construction.

In addition to consultation to support development of a CHMP, Traditional Owners have been consulted by ARTC with respect to Indigenous employment and training opportunities. A meeting with the Bigambul Native Title Aboriginal Corporation (BNTAC) Board, an interview with a Western Wakka Wakka Elder and an interview with another Aboriginal Party provided information for the social impact assessment (Chapter 17: Social). Key issues raised through this meeting and two interviews are summarised below.

19.3.5.3 Bigambul People

In 2019, BNTAC proposed a Statement of Commitment be formalised between ARTC and the Bigambul People, as recognised Traditional Owners with a Native Title determination. The scope of this commitment is discussed in Chapter 17: Social and Appendix X: Social Impact Assessment. Following evaluation of the revised draft EIS, where an approval is given, ARTC will re-engage with BNTAC about the 2019 Statement of Commitment. This engagement will consider the contemporary working arrangements required during the Project's construction works stage.

Key issues raised in consultation with the BNTAC identified the following key issues:

- ▶ The need for more comprehensive engagement in the EIS process
- ▶ The need to ensure access to job-readiness programs (e.g. White Card training, health and safety training) and skills training, noting that BNTAC has an existing workforce development strategy
- ▶ Interest in business opportunities, noting that BNTAC has a business development strategy and is developing a business register
- ▶ The potential to affect cultural heritage sites and values
- ▶ The need for cultural immersion training for all Project personnel working on Bigambul Country
- ▶ Potential for erosion during construction or operations to affect Country
- ▶ Potential for changes to flooding patterns or to surface or groundwater to affect cultural water flows
- ▶ Effects on physical fabric of shared cultural heritage.

Further details of engagement with BNTAC about these matters is documented in Appendix E: Consultation Report.

19.3.5.4 Western Wakka Wakka People

Engagement with the Western Wakka Wakka People and Endorsed Aboriginal Parties through 2021 had a strong focus on cultural heritage management. Further engagement between March and May 2022 focused on relationship management and future engagement protocols, as well as initial discussions about employment, training and business opportunities. Engagement with the Western Wakka Wakka People through 2021 to 2023 maintained a strong focus on cultural heritage management. In March 2022, engagement focused on future engagement protocols, as well as initial discussions about project opportunities across employment, training and business development. In February 2023, ARTC met with Western Wakka Wakka People representatives to introduce new Inland Rail team members, commence planning for discussions around employment, skills and training opportunities. As of September 2023, engagement was continuing by phone to identify an appropriate meeting schedule.

Details of consultation outcomes with the Western Wakka Wakka People regarding cultural heritage management, Indigenous participation and training, and native title are further outlined in Appendix E: Consultation Report and Appendix X: Social Impact Assessment.

19.3.5.5 Endorsed Aboriginal Parties for the unclaimed area

Details of engagement and consultation outcomes with Endorsed Aboriginal Parties regarding cultural heritage management, Indigenous participation and training, and Native Title are further outlined in Appendix E: Consultation Report, and Appendix X: Social Impact Assessment.

19.3.5.6 Non-Aboriginal heritage consultation

Non-Aboriginal cultural heritage consultation was primarily undertaken during site inspections between 3 February and 8 February 2019 and 10 October 2021. This consultation comprised discussions with landowners, representatives of QR and local community groups, including the Pittsworth & District Historical Society.

19.4 Existing environment

This section includes a description of each relevant Aboriginal and non-Aboriginal value or condition, informed by desktop research and field investigations.

19.4.1 Aboriginal heritage

Searches of the Aboriginal and Torres Strait Islander Cultural Heritage Database and Register were completed for the Project in August 2022 (Search ID 117366) and on 15 November 2023 (Search ID 148070) including for all borrow pit sites (see Appendix AD: Borrow Pits: Supporting Technical Information). Database records of Aboriginal Parties for the Project footprint are in Table 19-8. ARTC Inland Rail has three approved and registered CHMPs with the Bigambul People, Endorsed Party s35(7), and the Western Wakka Wakka People, under the *Aboriginal Cultural Heritage Act 2003* (Qld).

TABLE 19-8 ABORIGINAL PARTIES FOR THE PROJECT FOOTPRINT

| Tribunal file number | Reference number | Name | Project chainage |
|----------------------|------------------|----------------------------|---|
| QCD2016/012 DET | QUD101/2009 | Bigambul People Part A | Chainage (Ch) 29.4 km to Ch 31.2 km (NS2B), Ch 5.6 km to Ch 6.0 km, Ch 17.2 km to Ch 17.5 km, Ch 26.3 km to Ch 27.9 km and Ch 36.0 km to Ch 43.5 km |
| QC2022/005 | QUD101/2009 | Bigambul People #4 | Ch 61.4km to Ch 144.42km (Grasstree Creek) |
| QC1999/004 PRC | GUD6004/99 | Western Wakka Wakka People | Ch 149.5 to 209.0 km |

The Aboriginal and Torres Strait Islander Cultural Heritage Database and Register search indicated there are 43 reported Aboriginal cultural heritage sites within 1 km of the Project footprint. A breakdown of these sites is provided in Table 19-9. The majority of these sites are artefact scatters, with the remainder being scarred/carved trees, object collections, a shell midden, Aboriginal Intangible Places and burials. CHMP negotiations undertaken to date have included the process to undertake cultural heritage surveys for the Project footprint. Details of a CHMP are confidential, as is information about Aboriginal heritage sites and locations, and no further detail can be provided in this document.

TABLE 19-9 SITES ON THE DATABASE AND REGISTER WITHIN 1 KM OF THE PROJECT FOOTPRINT

| Site type | Count | Per cent of the total |
|-----------------------------|-----------|-----------------------|
| Aboriginal Intangible Place | 2 | 4.65% |
| Artefact scatter | 23 | 53.49% |
| Burial | 3 | 6.98% |
| Object collection | 3 | 6.98% |
| Scarred/carved tree | 11 | 25.58% |
| Shell midden | 1 | 2.33% |
| Total | 43 | 100.00% |

Representatives of the BNTAC completed their cultural heritage survey of the section of the Project footprint traversing Whetstone State Forest on 20 October to 21 October 2020, with an archaeologist in attendance. Two artefacts were identified—one was located outside the Project footprint and the other was located on the edge of the Project footprint and left in situ. The results of the survey and requisite management arrangements have been documented and supported in the cultural heritage assessment report and submitted to DESI to support partial revocation of Whetstone State Forest.

A cultural heritage survey of the Bringalily State Forest section of the Project footprint has been completed and will support the progression of the partial revocation of Bringalily State Forest.

19.4.2 Non-Aboriginal heritage

19.4.2.1 Register searches

A search of all relevant statutory and non-statutory heritage registers, undertaken in November 2023 indicated that there are no Commonwealth or State-listed heritage places within 1 km of the Project footprint. There are four locally listed heritage places within 1 km of the Project footprint one of which is also in the impact assessment area. Additionally, there is one non-statutory QR heritage place and five non-statutory DESI Cultural Heritage Information Management System places within 1 km of the Project footprint, two of which are in the impact assessment area.

A summary of all register searches is provided in Table 19-10. Local heritage places and non-statutory heritage places within 1 km of the Project footprint are summarised in Table 19-11 and Table 19-12, respectively.

TABLE 19-10 SUMMARY OF REGISTER SEARCHES

| Register | Outside the impact assessment area and within 1 km of the Project footprint | Within the impact assessment area (within 50 m of the Project footprint) |
|---|---|--|
| World Heritage List | 0 | 0 |
| National Heritage List | 0 | 0 |
| Commonwealth Heritage List | 0 | 0 |
| Queensland Heritage Register | 0 | 0 |
| Register of the National Estate (non-statutory) | 0 | 0 |
| Register of the Queensland National Trust | 0 | 0 |
| Cultural Heritage Information Management System (non-statutory) | 3 | 2 |
| QR Heritage Register (non-statutory) | 1 | 0 |
| Queensland World War II Historic Places (non-statutory) | 0 | 0 |
| Monument Australia (non-statutory) | 0 | 0 |
| TRC Local Heritage Register | 2 | 0 |
| GRC Local Heritage Register | 1 | 1 |

TABLE 19-11 LOCAL HERITAGE PLACES WITHIN 1 KM OF THE PROJECT FOOTPRINT

| Place | Location | Source | Proximity to the Project |
|---------------------------------|-------------|-----------------------------|---|
| Railway Bridge | Whetstone | GRC Local Heritage Register | Outside of the impact assessment area Within 1 km of the Project footprint |
| Yelarbon Soldiers Memorial Hall | Yelarbon | GRC Local Heritage Register | Within the impact assessment area |
| Gowrie Homestead | Kingsthorpe | TRC Local Heritage Register | Outside of the impact assessment area Within 1 km of the Project footprint |
| 49 Daphne St, Brookstead | Brookstead | TRC Local Heritage Register | Outside of the impact assessment area Within 1 km of the Project footprint |

TABLE 19-12 NON-STATUTORY HERITAGE PLACES WITHIN 1 KM OF THE PROJECT FOOTPRINT

| Place | Register | ID | Proximity to the Project |
|--|---|-------|--|
| Pittsworth railway complex | Cultural Heritage Information Management System | 2438 | Outside of the impact assessment area. Within 1 km of the Project footprint |
| Turallin 'superseded by Mellarin' | Cultural Heritage Information Management System | 24749 | Outside of the impact assessment area. Within 1 km of the Project footprint |
| Site of former Brookstead Station building | Cultural Heritage Information Management System | 2440 | Within the impact assessment area |
| Brookstead Station building | Cultural Heritage Information Management System | 22934 | Within the impact assessment area |
| Macintyre Brook bridge, Whetstone | Cultural Heritage Information Management System | 2425 | Outside of the impact assessment area. Within 1 km of the Project footprint |
| Macintyre Brook bridge, Whetstone | QR | N/A | Outside of the impact assessment area Within 1 km of the Project footprint |

19.4.2.2 Assessment results

A total of 41 AOI were assessed using the approach outlined in Section 19.3.4.2. A summary of each AOI is presented in Table 19-13 and shown on Figure 19-2. The summary information includes location, description and proximity to the Project. Regarding proximity, consideration is given to both the permanent and temporary works boundary.

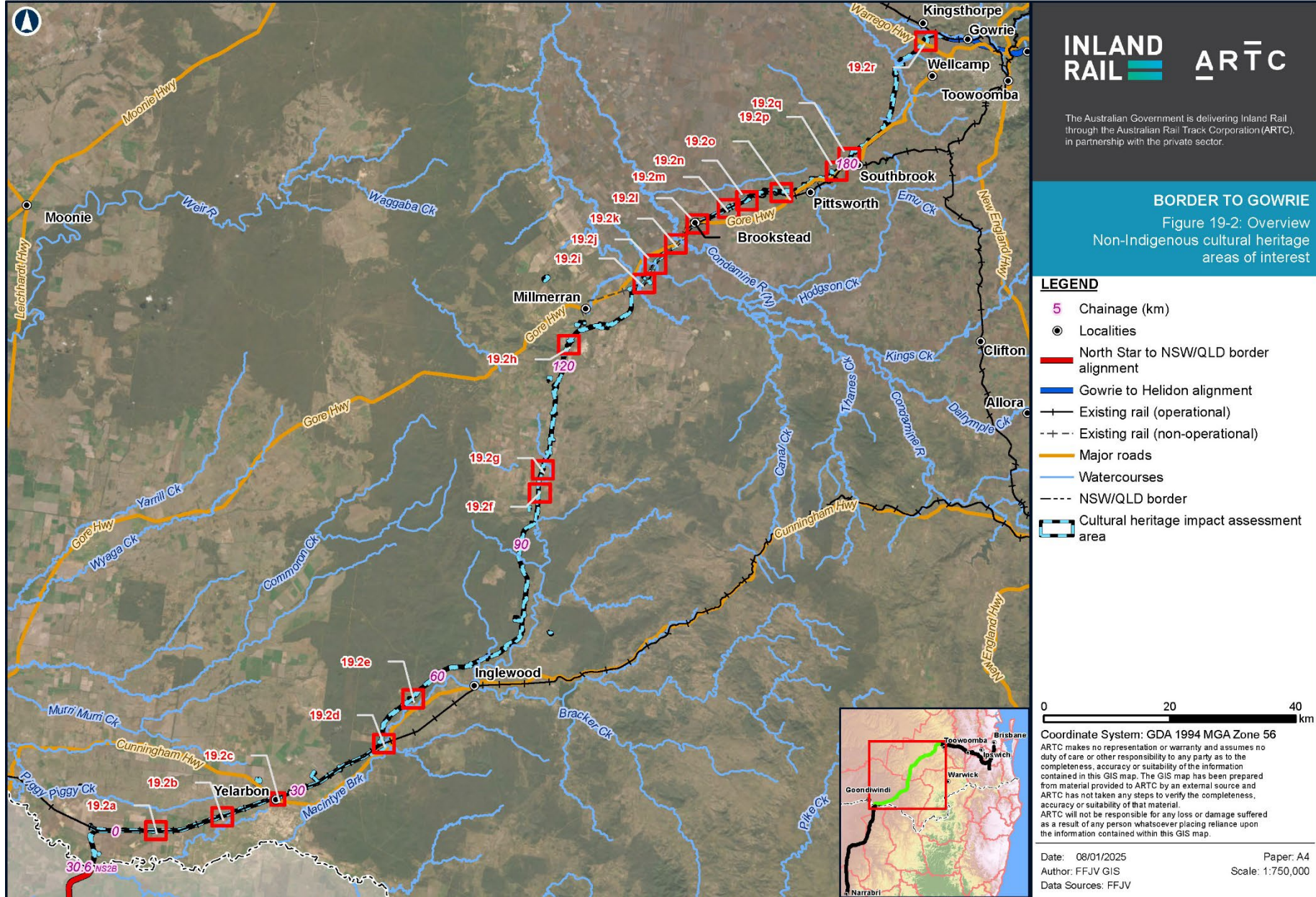
A full description of each AOI is in Appendix Z: Non-Aboriginal Cultural Heritage Survey Report.

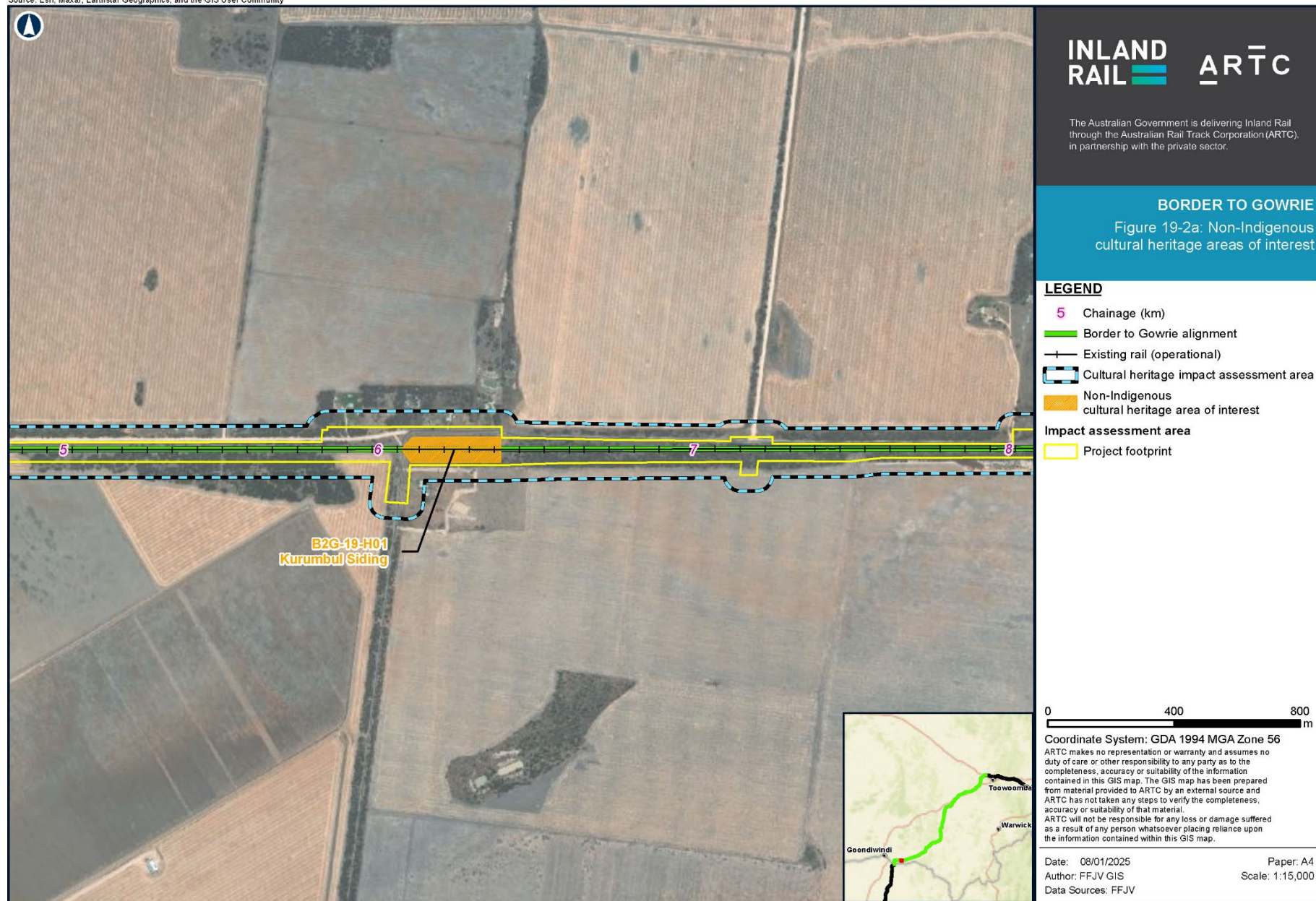
TABLE 19-13 NON-ABORIGINAL ASSESSMENT OBSERVATIONS

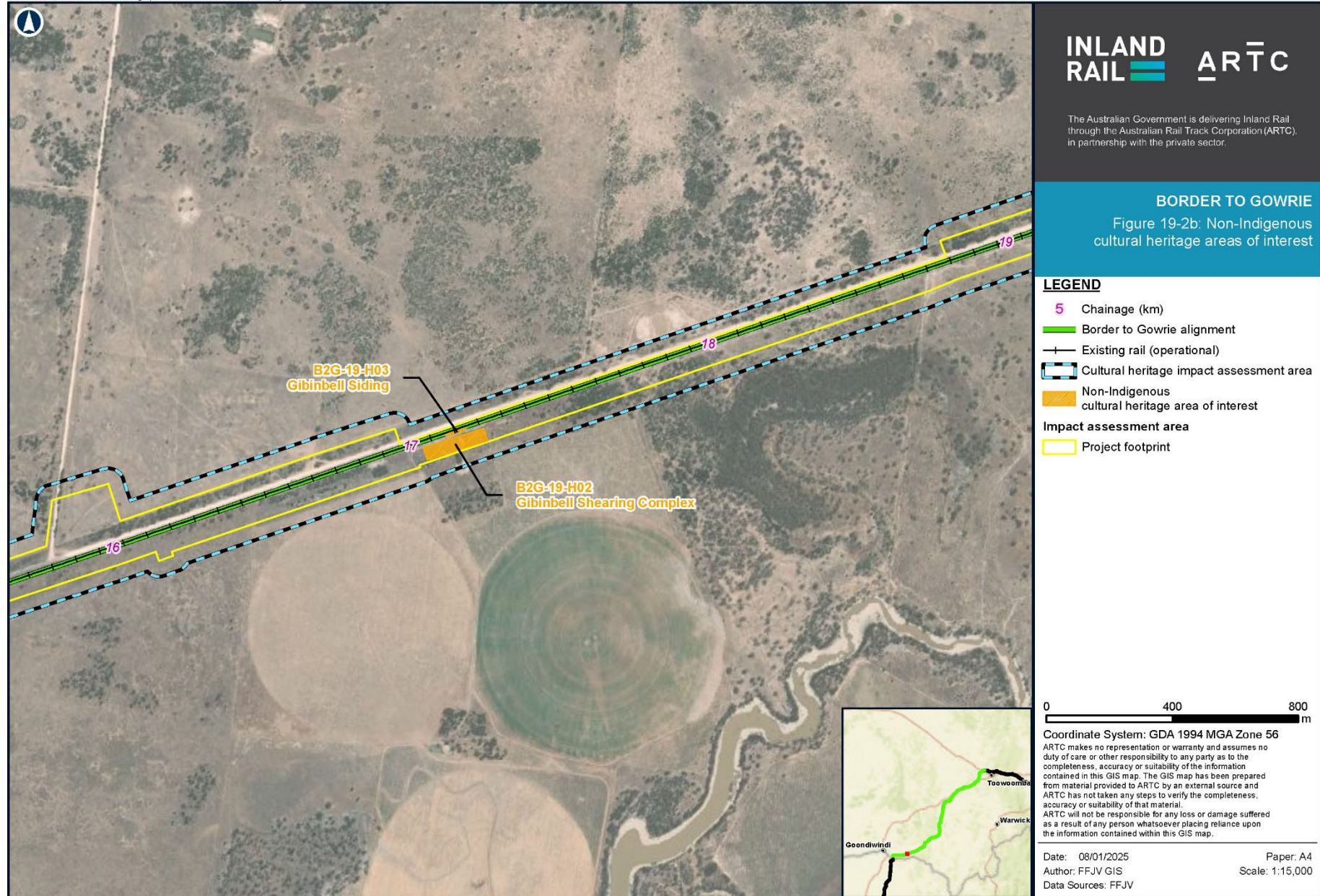
| Site ID | Site name | Site description | Site location (Lot/plan) | Proximity to the Project |
|------------|--|---|--|---|
| B2G-19-H01 | Kurumbul Station | Railway station established in 1908 as a part of the South Western Line. No original station buildings remain. | Lot 481 on SP119198 | North-eastern extent in the temporary footprint. Remainder in permanent footprint |
| B2G-19-H02 | Gibinbell shearing complex | Large significant shearing shed complex and associated structures | Lot 413 on SP119197 | In permanent footprint |
| B2G-19-H03 | Gibinbell siding | Railway siding established in 1908 as a part of the South Western Line. No original station buildings remain | Lot 413 on SP119197 | In permanent footprint |
| B2G-19-H04 | Yelarbon and District Soldiers Memorial Hall | Early 20 th century timber community hall | Lot 106 on Y5691 | Project footprint moved to avoid place. Now in impact assessment area (outside Project footprint) |
| B2G-19-H05 | ANZAC Memorial Garden | Garden adjacent to the Yelarbon and District Soldiers Memorial Hall, features two war memorials and other commemorative plaques | Lot 107 on Y5691 | Project footprint moved to avoid place. Now in impact assessment area (outside Project footprint) |
| B2G-19-H06 | Cancer charity tree | Tree planted for cancer charity | Taloom Street, Yelarbon | In permanent footprint |
| B2G-19-H07 | Church (former) | Early 20 th century timber church | Lot 2 on RP120829 | Impact assessment area (outside Project footprint) |
| B2G-19-H08 | Yelarbon Mill 1 | Timber mill, likely dating to the early 20 th century | Lot 1 on RP62008 | Impact assessment area (outside Project footprint) |
| B2G-19-H09 | Yelarbon Mill 2 | Timber mill, likely dating to the mid-late 20 th century | Lot 99 on SP222802 | Northern extent in permanent footprint Remainder in temporary footprint |
| B2G-19-H10 | Petrol station | 1950s commercial building, most likely a petrol station | Lot 8 on Y56911 Lot 9 on Y56911 Lot 10 on Y56911 | Eastern extent in temporary footprint |
| B2G-19-H11 | Yelarbon railway complex | Railway station established c.1908 as a part of the South Western Line. No original station buildings remain | Lot 20 on SP120712 Lot 21 on SP120712 | Silos and grain shed in temporary footprint. Remainder in permanent footprint |
| B2G-19-H12 | Tree trunk | Trunk of a large, felled tree. Likely a local landmark relating to the timber industry | Lot 110 on SP171826 | In permanent footprint |
| B2G-19-H13 | Whetstone siding | Railway siding established in 1908 as a part of the South Western Line. No original station buildings remain. Refer Appendix AE: Whetstone Material Distribution Centre: Supporting Technical Information for further discussion. | Lot 352 on SP116434 | In temporary footprint |

| Site ID | Site name | Site description | Site location (Lot/plan) | Proximity to the Project |
|------------|---|--|--------------------------|---|
| B2G-19-H14 | Homestead complex | Homestead complex, including two houses and a number of outbuildings | Lot 511 on RP226715 | Eastern extent in permanent footprint |
| B2G-19-H15 | Homestead | Homestead consisting of two linked dwellings. Likely colonial era | Lot 107 on MH808 | Impact assessment area (outside Project footprint) |
| B2G-19-H16 | Structure | Small timber structure | Lot 169 on MH786 | In permanent footprint |
| B2G-19-H17 | Sheds | Two skillion roofed timber and corrugated iron sheds | Lot 37 on MH523 | Impact assessment area (outside Project footprint) |
| B2G-19-H18 | Lookout | Lookout and rest area | Lot 4 on SP126840 | Within 1 km of the Project footprint |
| B2G-19-H20 | Grass Tree Creek rail bridge | Low timber trestle and girder rail bridge over Grass Tree Creek | Lot 4 on RP16058 | In permanent footprint |
| B2G-19-H21 | Yandilla Station | Railway station established c.1911 as a part of the South Western Line. No original station buildings remain | Lot 202 on SP124721 | North-western extent in permanent footprint. Remainder in temporary footprint |
| B2G-19-H22 | Protest public art | Elaborate piece of public art protesting the implementation of the Inland Rail Project | Lot 2 on RP61876 | In permanent footprint |
| B2G-19-H23 | Condamine River bridge | Low timber trestle and girder rail bridge over the Condamine River | Lot 114 on SP113906 | In permanent footprint |
| B2G-19-H24 | Pampas Station | Railway station established c.1911 as a part of the South Western Line. No original station buildings remain | Lot 23 on SP124720 | In permanent footprint |
| B2G-19-H25 | Pampas Memorial Hall | Mid-20 th century timber community hall | Lot 84 on SP109985 | In permanent footprint |
| B2G-19-H26 | Sheds | Two corrugated iron and timber farm sheds | Lot 1 on RP14242 | In permanent footprint |
| B2G-19-H27 | Condamine River bridge 2 | Low timber trestle and girder rail bridge over the Condamine River (North Branch) | Lot 2 on RP37132 | In permanent footprint |
| B2G-19-H28 | Brookstead Station | Railway station established 1911 as a part of the South Western Line. No original station buildings remain (B2G-19-H30) | Lot 121 on SP104977 | South-eastern extent in temporary footprint |
| B2G-19-H29 | Brookstead Station building (relocated) | Relocated Brookstead Station building in park adjacent to railway | Lot 13 on SP112652 | Impact assessment area (outside Project footprint) |
| B2G-19-H30 | Cecilvale Station | Railway station established 1911 as a part of the South Western Line at Cecil Plains. No original station buildings remain | Lot 2 on RP14245 | In permanent footprint |
| B2G-19-H31 | Yarranlea Station | Railway station established 1911 as a part of the South Western Line. No original station buildings remain | Lot 53 on SP112651 | Southern extent in temporary footprint |
| B2G-19-H32 | Murlaggan Station | Railway station established 1911 as a part of the South Western Line. No original station buildings remain | Lot 2 on RP7479 | Northern extent in permanent footprint |

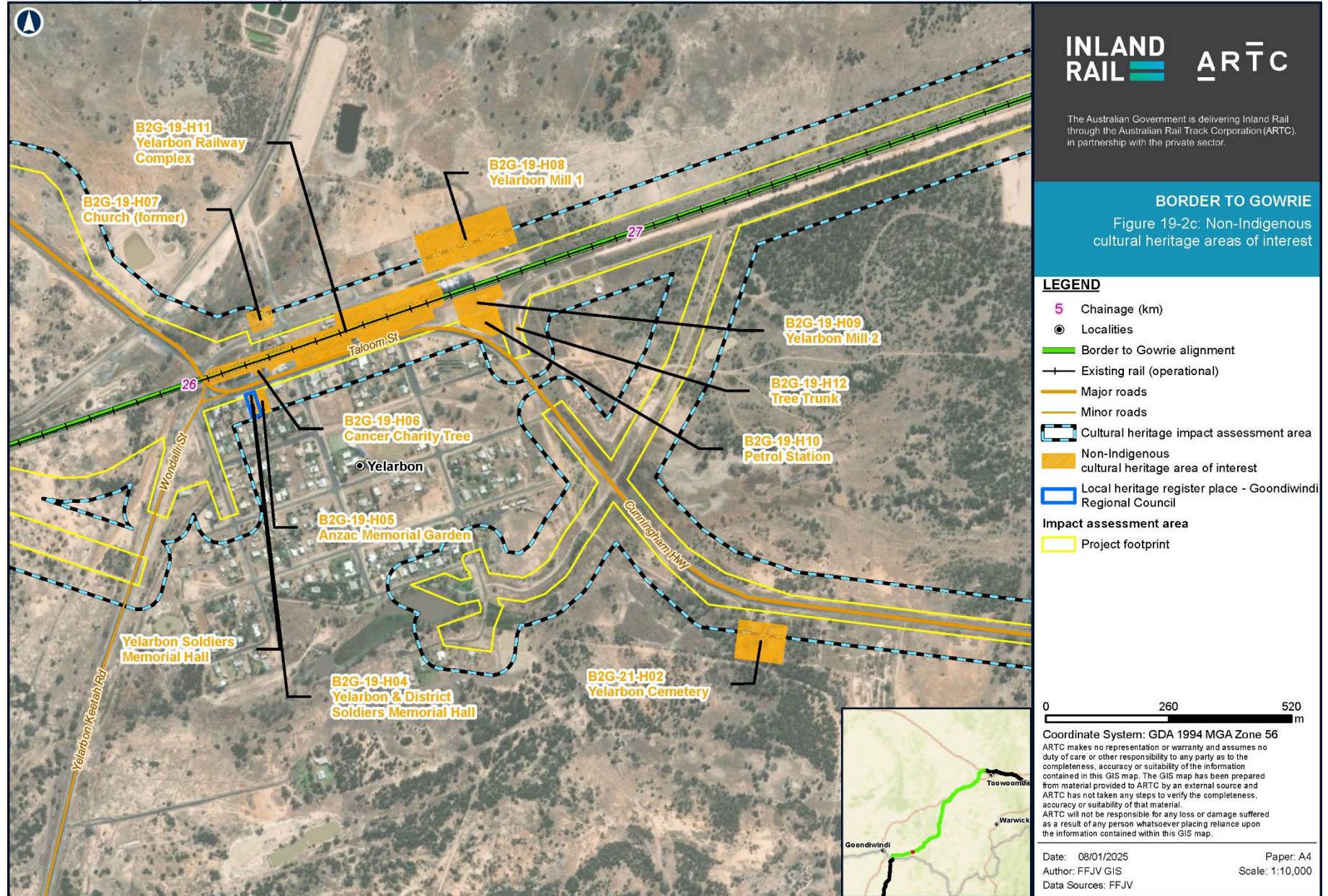
| Site ID | Site name | Site description | Site location (Lot/plan) | Proximity to the Project |
|------------|----------------------------|---|---|---|
| B2G-19-H33 | Homestead complex | Late 19 th century homestead complex, with significant archaeological deposits of earlier structure | Lot 1 on RP7470 | South-eastern extent in temporary footprint |
| B2G-19-H34 | Archaeological site | Possible remains of late 19 th century house or outbuildings | Lot 11 on SP285307 | South-eastern extent in permanent footprint |
| B2G-21-H02 | Yelarbon Cemetery | Public cemetery administered by Goondiwindi Regional Council adjacent to the Cunningham Highway | Lot 16 on MH288 | Impact assessment area (outside Project footprint) |
| B2G-21-H03 | Avonlea homestead complex | Homestead complex including a house and at least two outbuildings (likely sheds) | Lot 109 on DY241 | Impact assessment area (outside Project footprint) |
| B2G-21-H04 | Multiple structures | Multiple structures including a house, garden and at least four other structures (likely sheds and other farm infrastructure) | Lot 20 on SP254028 | North-eastern extent in permanent footprint |
| B2G-21-H09 | Brookstead Hotel | Brookstead Hotel including reception, bar and accommodation dating to the early 20 th century | Lot 141 on RP14234 | Impact assessment area (outside Project footprint) |
| B2G-21-H10 | House and windmill complex | House and windmill complex including a house and at least two other structures (likely sheds) | Lot 3822 on A341940 | North-eastern most extent in permanent footprint |
| B2G-21-H12 | Shed | Shed | Lot 2 on RP182048 | In permanent footprint |
| B2G-21-H13 | Green Hills Hotel complex | Green Hills Hotel complex including the grave of Maria Tibbs, artefact scatter, cottage, house and timber posts | Lot 1789 on A34919 Lot 2718 on A341307 | Southern extent (including graves) in permanent footprint |
| B2G-21-H14 | Fairvale homestead complex | Fairvale homestead complex including a house and at least four sheds. The house likely dates to the late colonial period. | Lot 2 on RP110779 | Impact assessment area (outside Project footprint) |

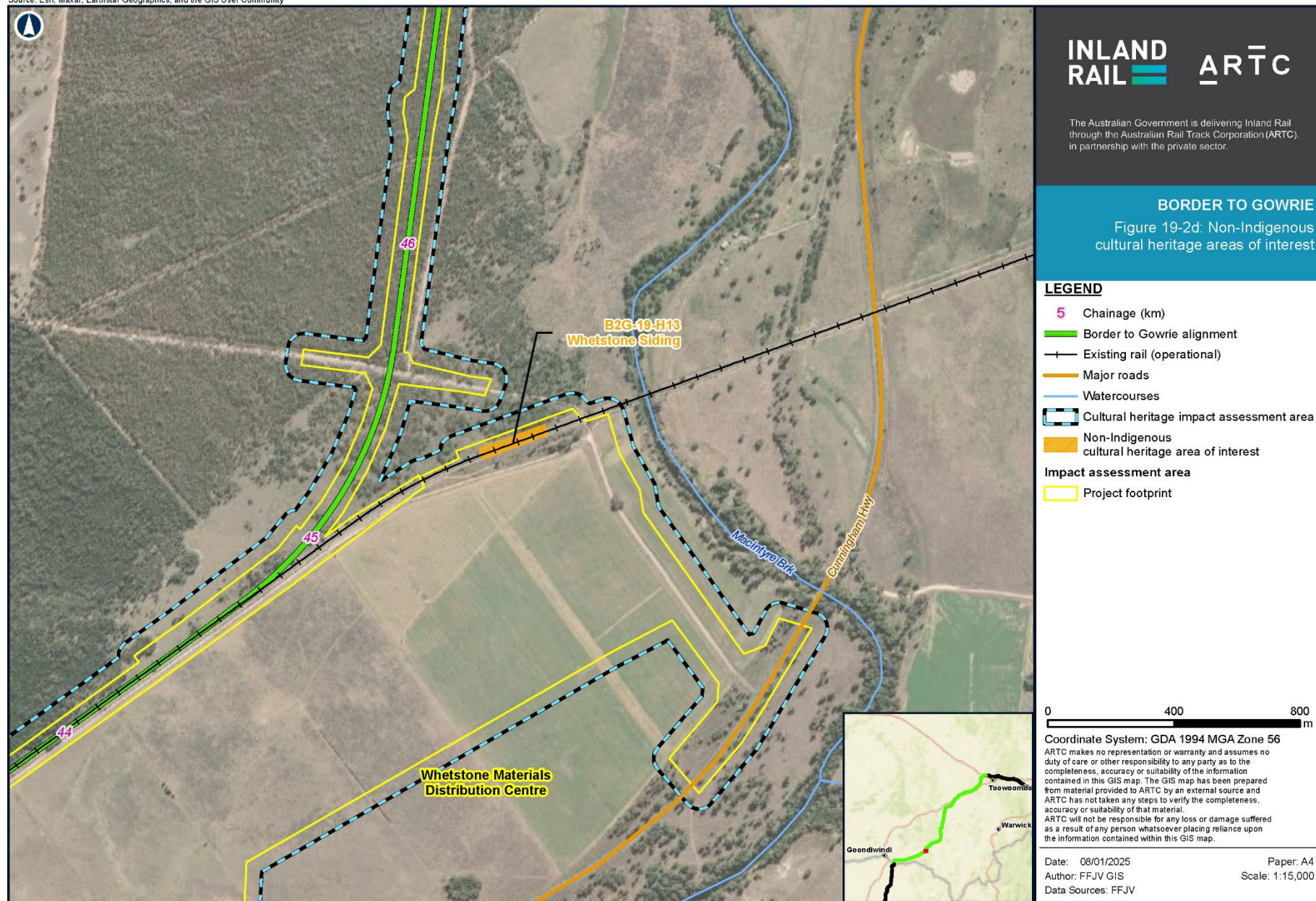




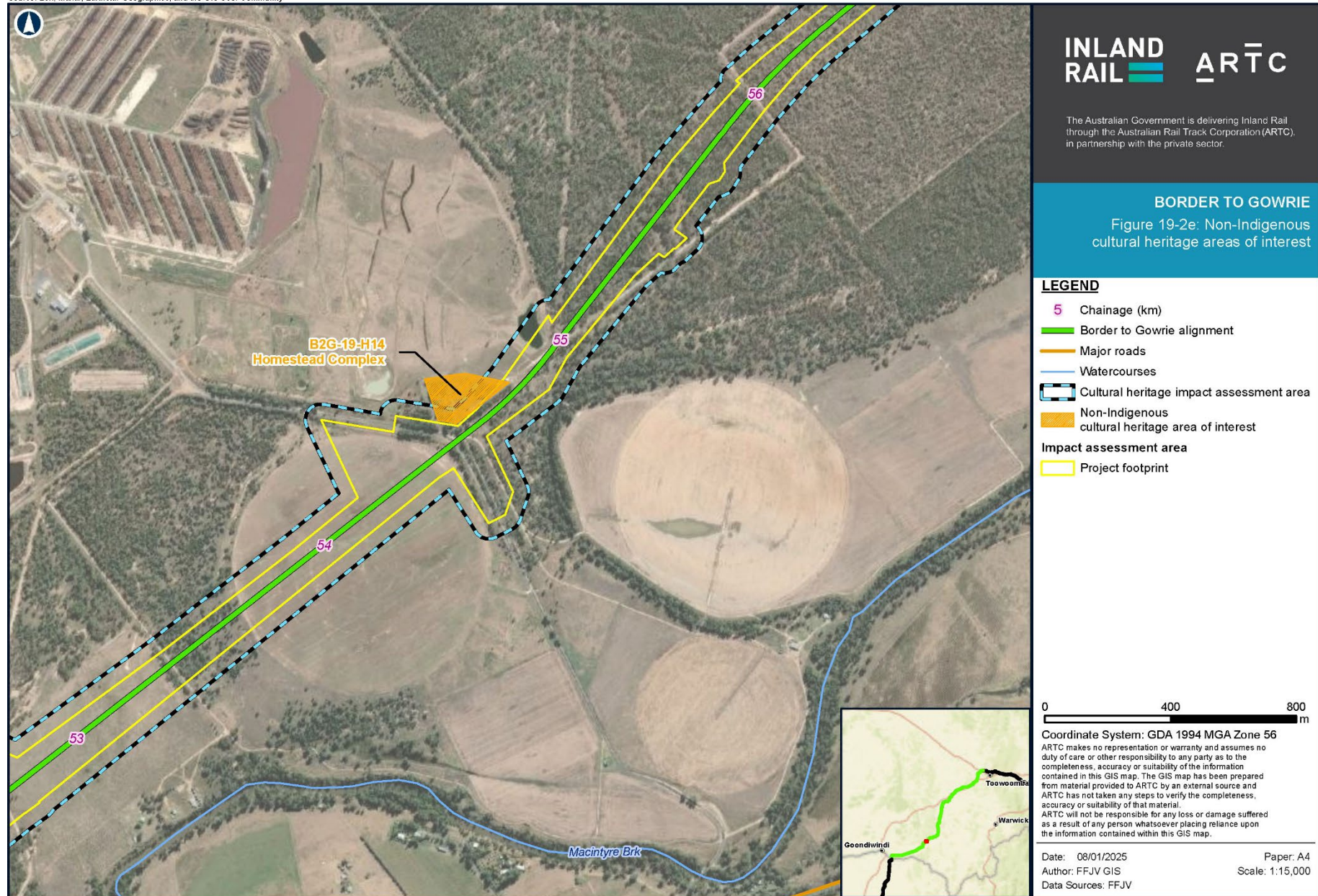


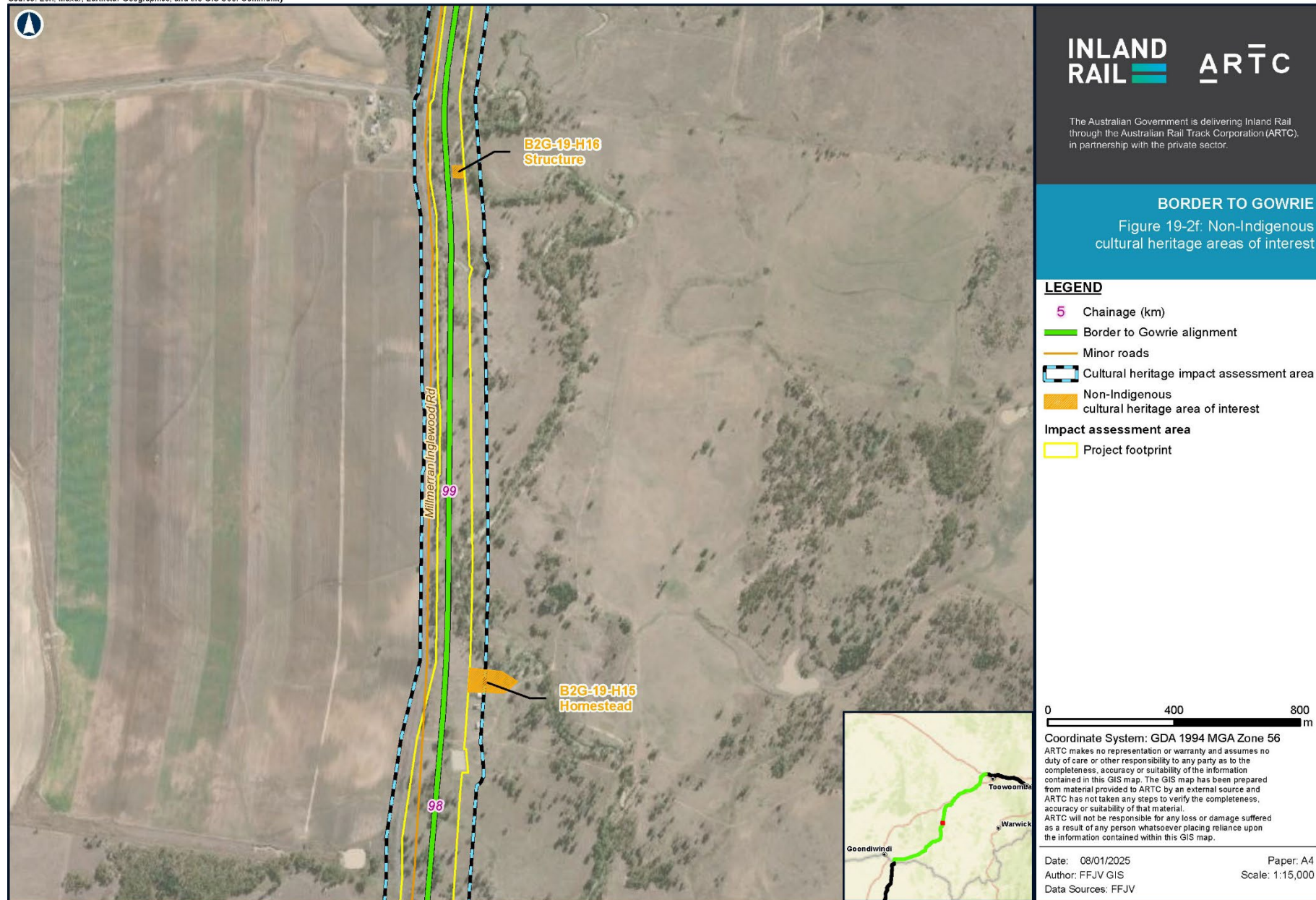
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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

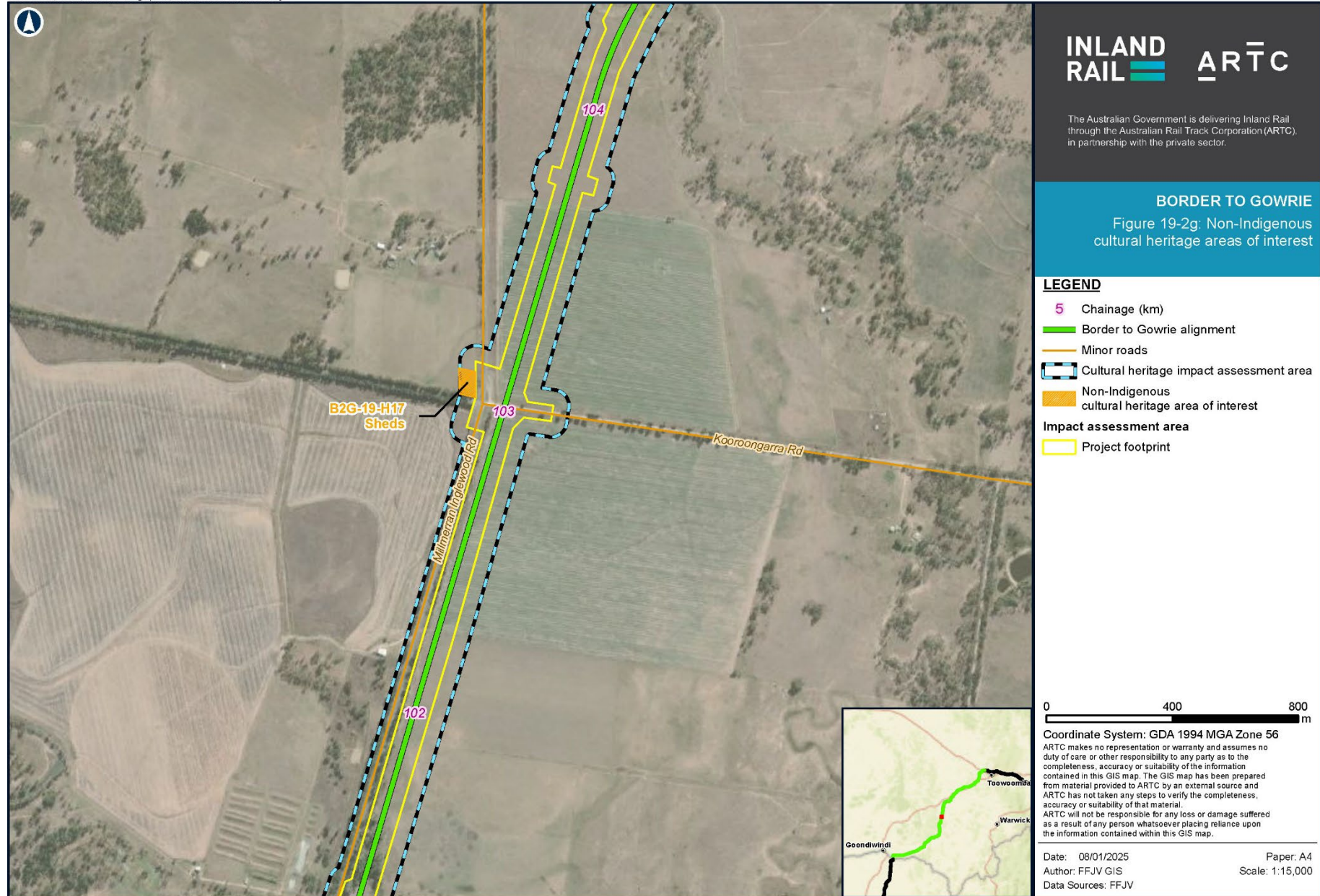


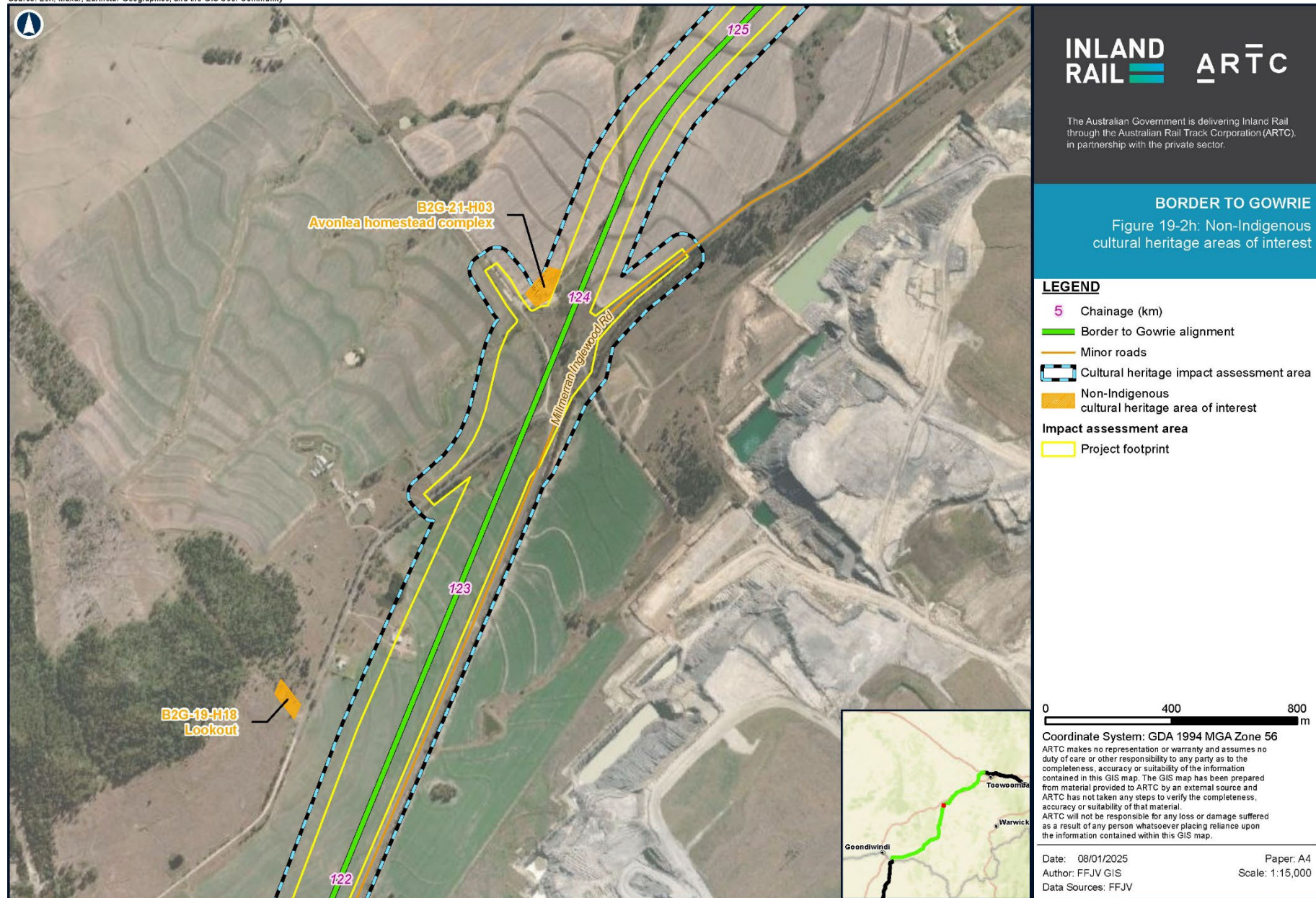


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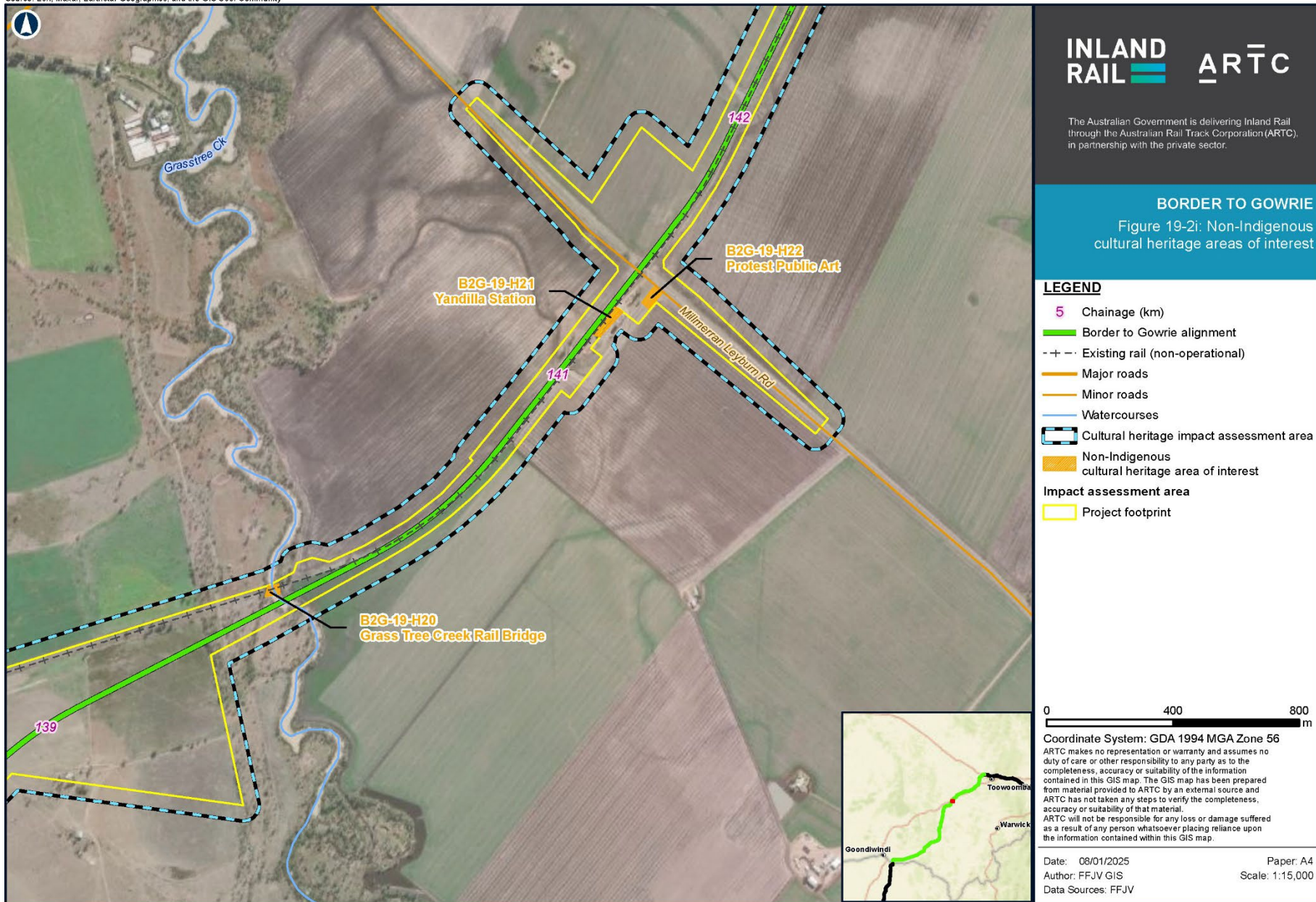




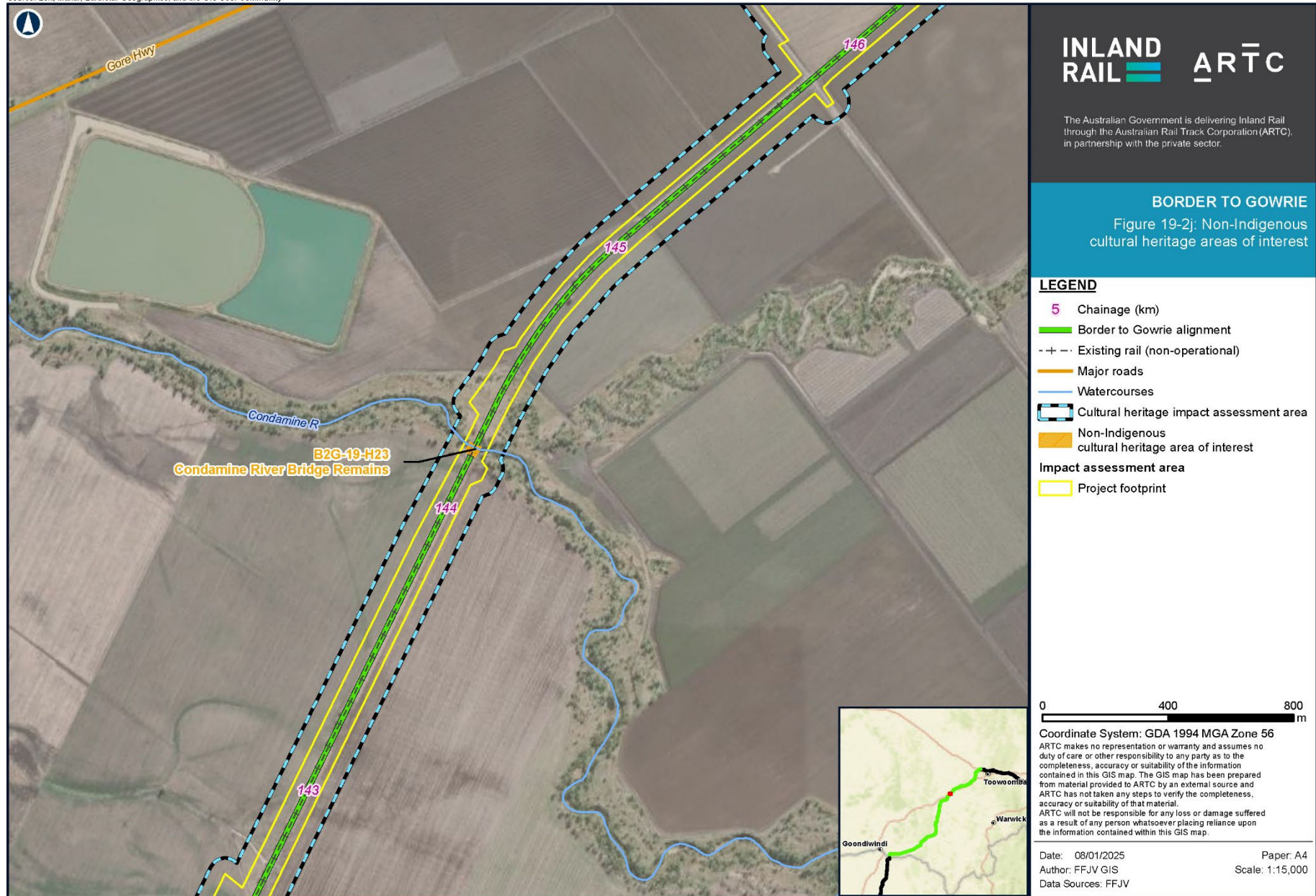




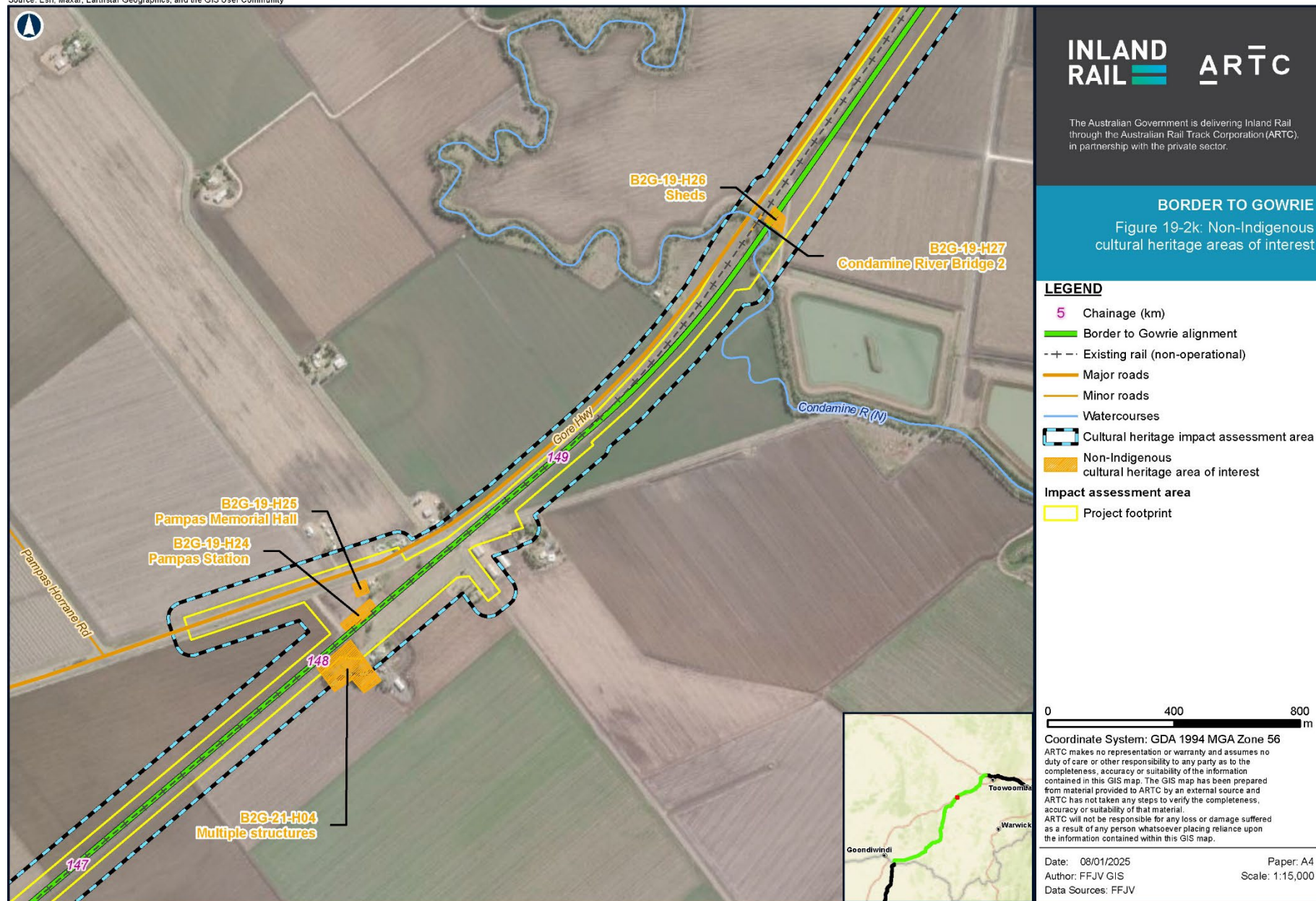
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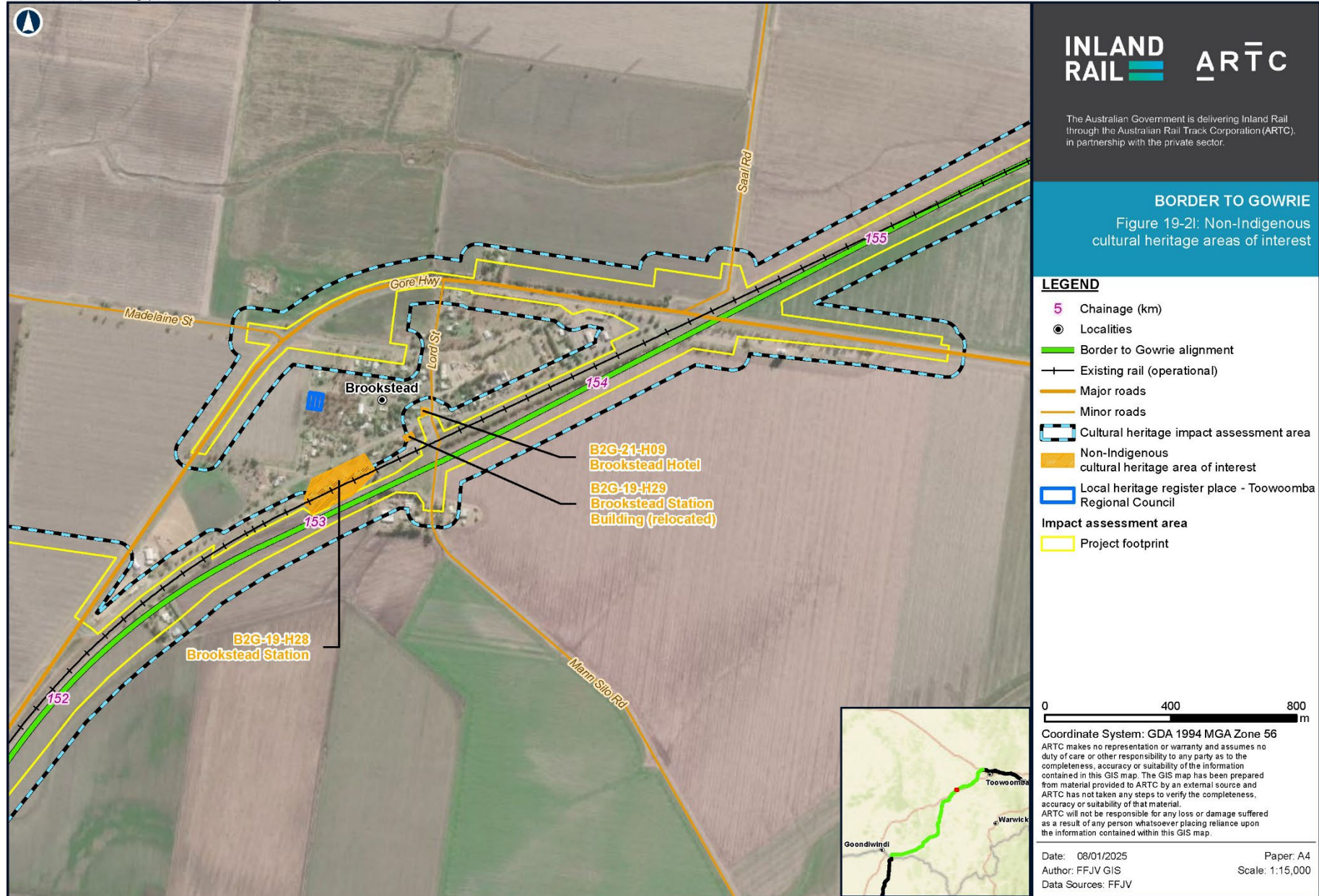


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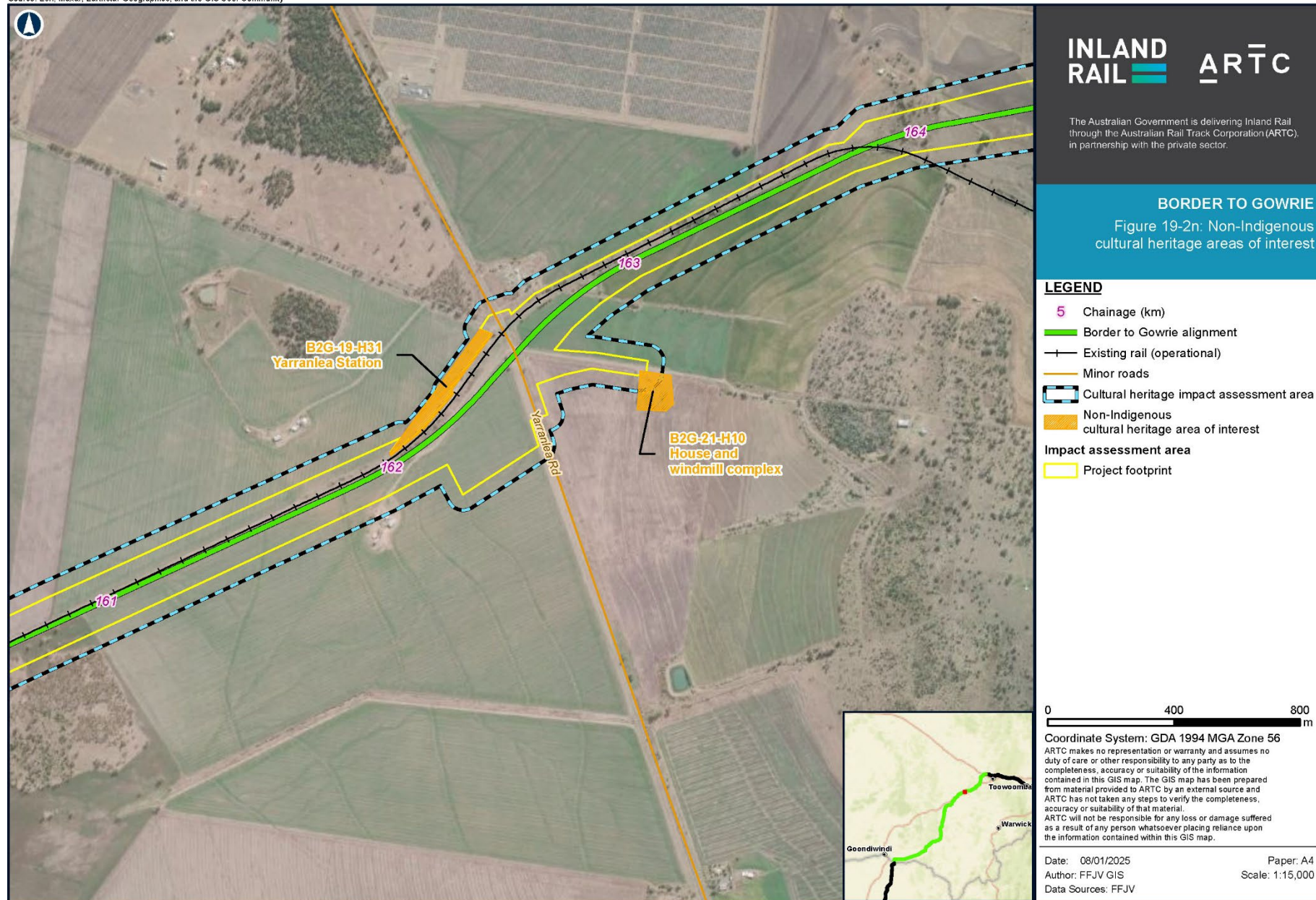


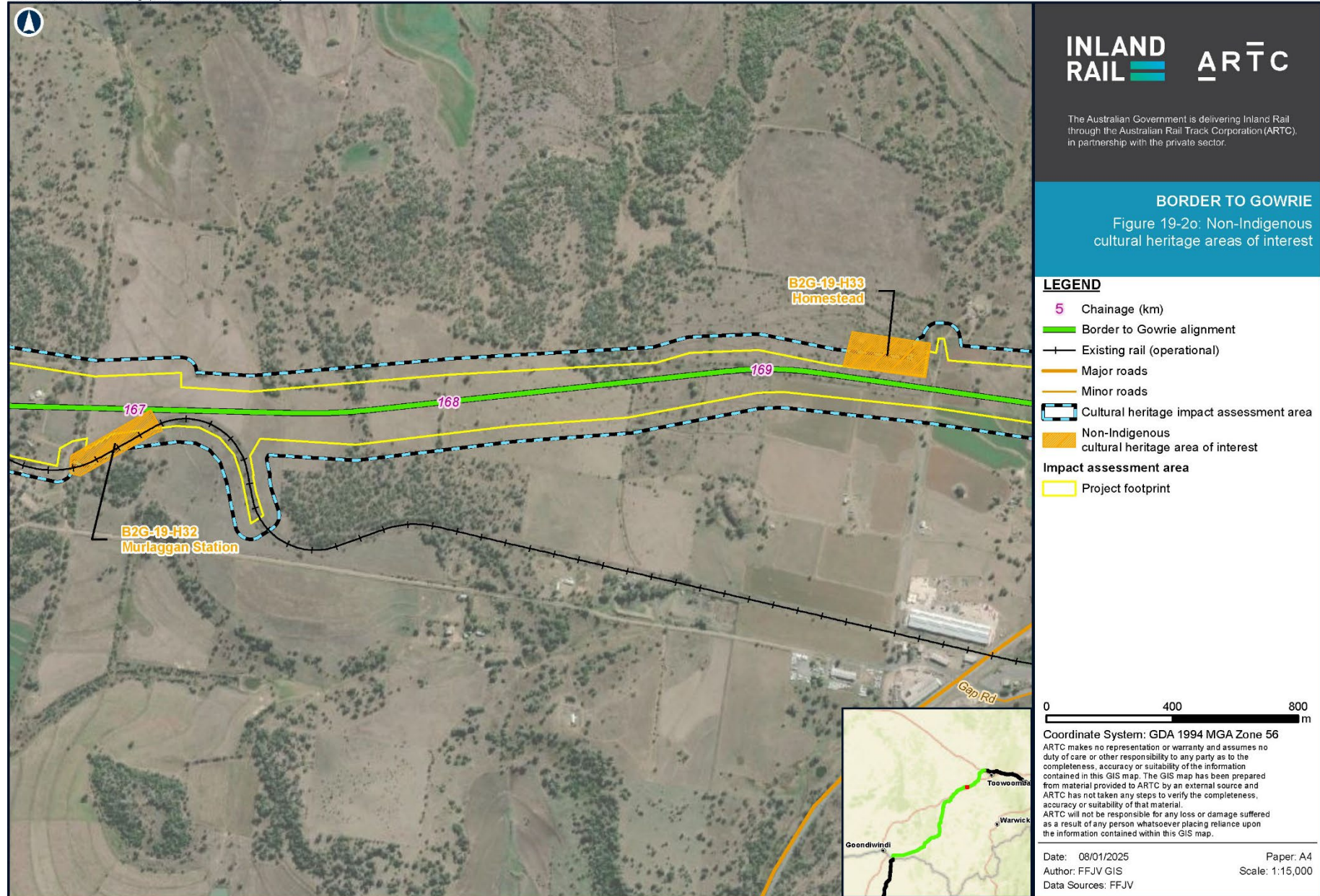
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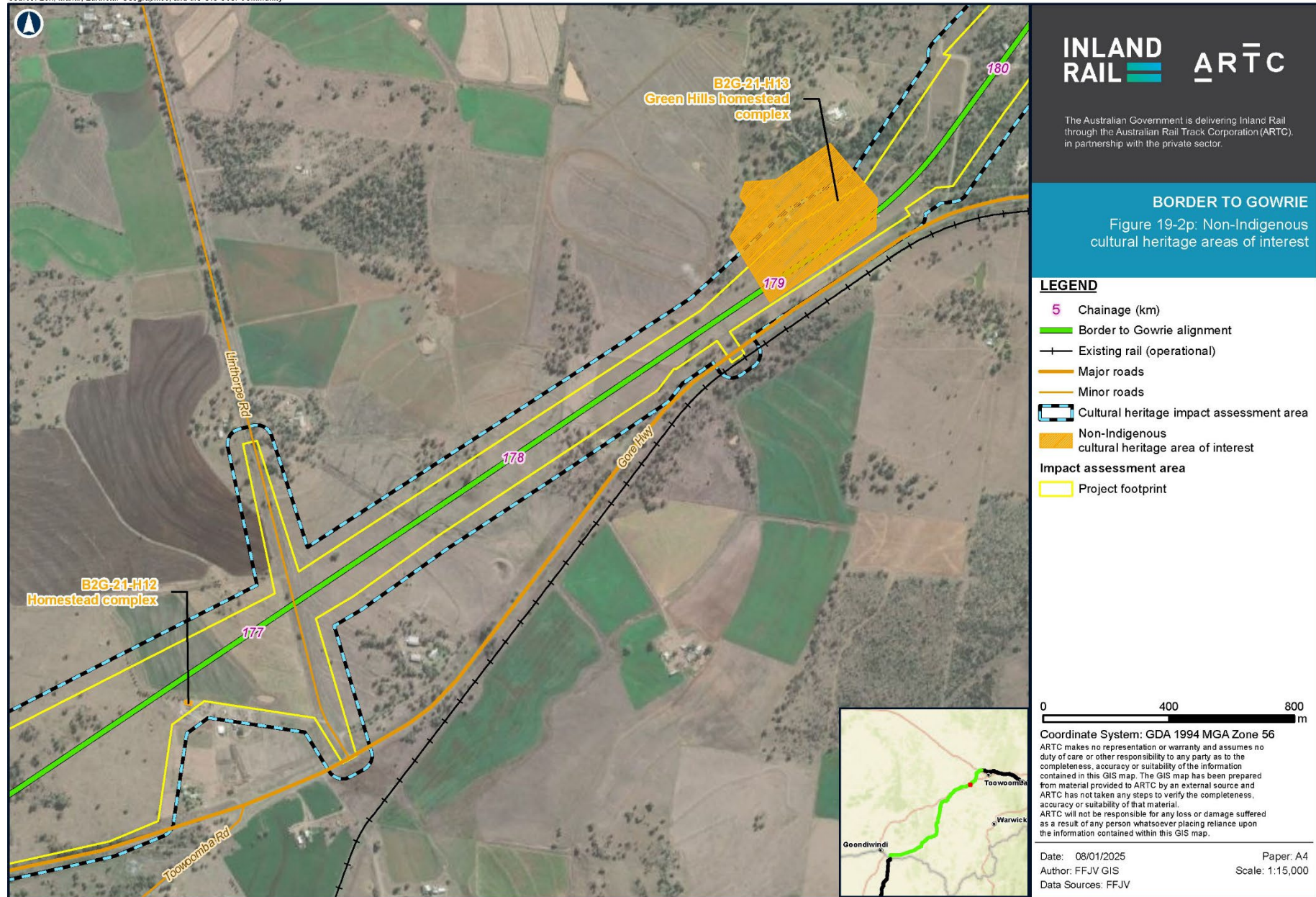




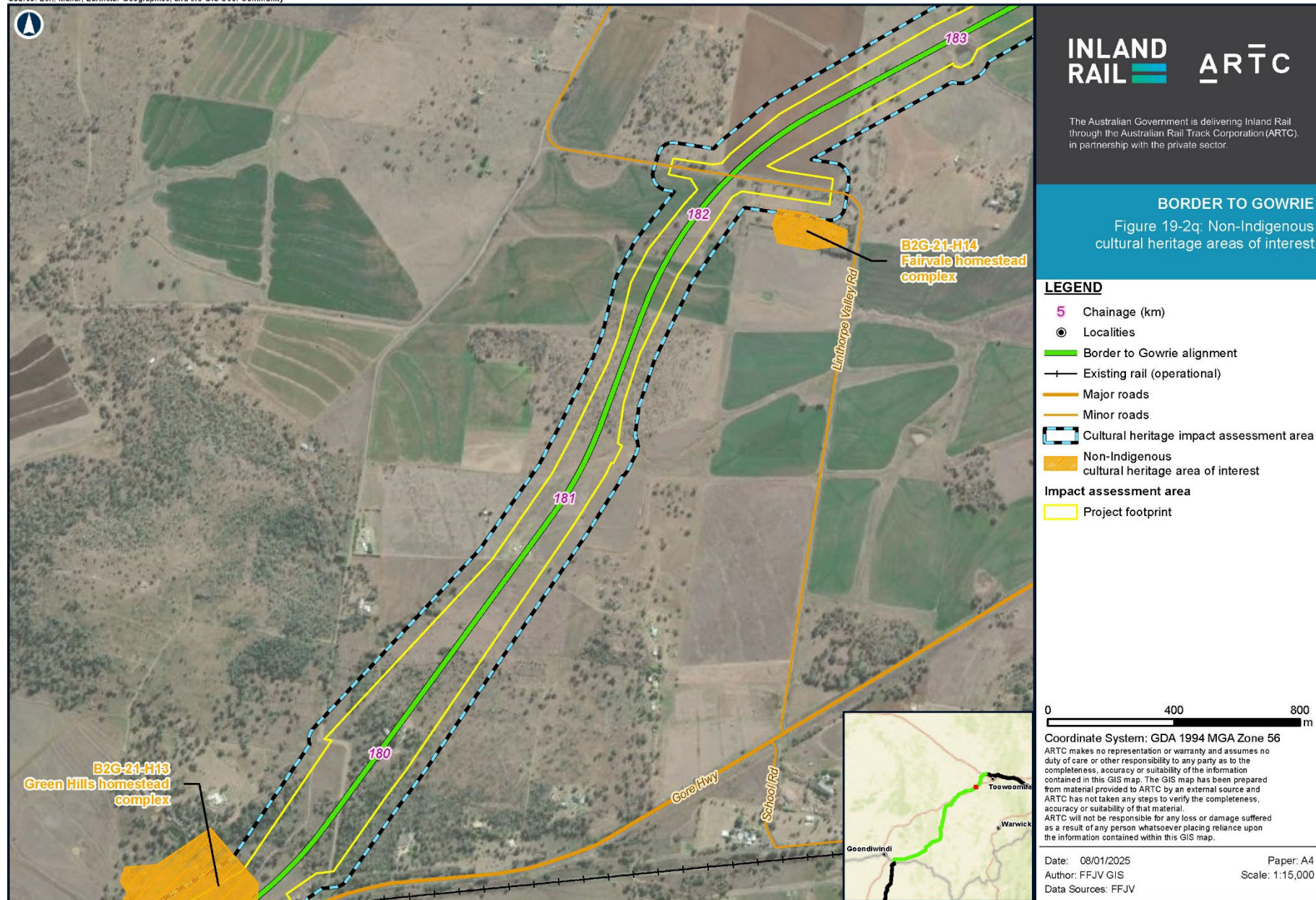




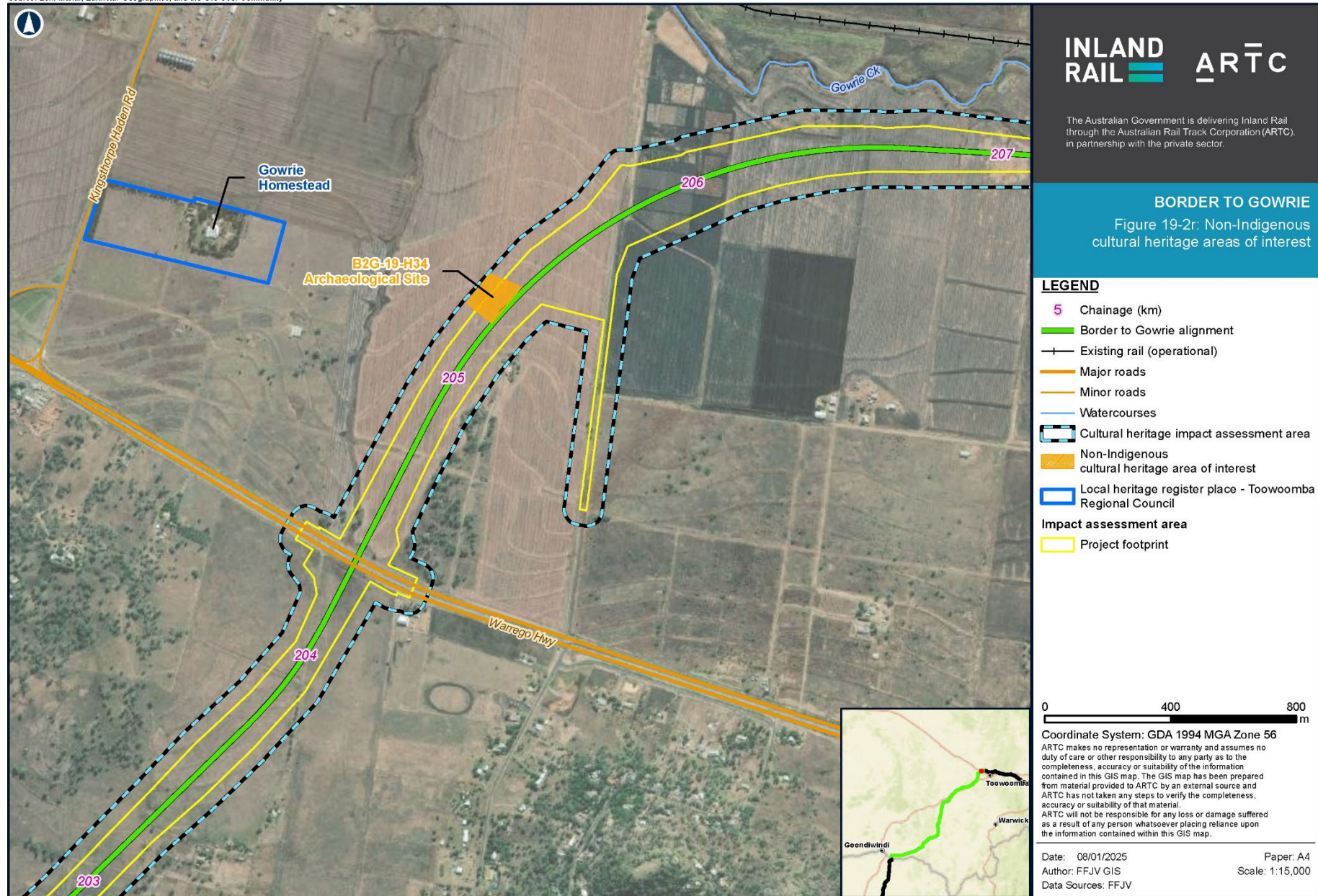
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Map by: TM/AWS/AJ/DTH Z:\GIS\GIS_310_B2G\Tasks\310-GIS-20220622\1032_Cultural_heritage\310-GIS-20220622\1032_ARTC_Fig19-2_Non_Indigenous_cultural_heritage_AOI_v7.mxd Date: 8/01/2025 14:51



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Map by: TM/AWS/AJ/DTH Z:\GIS\GIS_310_B2G\Tasks\310-GIS-202206221032_Cultural_heritage\310-GIS-202206221032_ARTC_Fig19-2_Non_Indigenous_cultural_heritage_AOI_v7.mxd Date: 8/01/2025 14:51

19.4.2.3 Significance assessment

An assessment of significance is undertaken to explain why a particular site is important and to enable the appropriate site management and curtilage to be determined. Cultural significance is defined in the Burra Charter (ICOMOS (Australia), 2013) as meaning ‘aesthetic, historic, scientific or social value for past, present or future generations’ (Article 1.1). Cultural significance may be derived from a place’s fabric, association with a person or event, or for its research potential. The significance of a place is not fixed for all time, and what is of significance to us now may change as similar items are located, more historical research is undertaken and/or community tastes change.

As discussed in Section 19.3.4.3, the QH Act prescribes eight criteria that may be used to measure the heritage value of a place and determine its significance: historical, rarity, research, representativeness, aesthetic, creative/technical, social and associational. A place need only fulfil one of these criteria to be considered of heritage significance (DEHP, 2013b).

The relative heritage significance of places in Queensland is measured as a series of thresholds representing the importance of the place: world, national, State and local. As defined by DESI (DEHP, 2013b), local heritage places contribute to our understanding of important themes in local history, while State heritage places contribute to our understanding of themes and processes that are of broader relevance. Places need to be of at least regional relevance to be considered of State significance (DEHP, 2013b).

Significance assessment has been informed with consideration for feedback received from discussions with landowners, representatives of QR and local community groups, including the Pittsworth & District Historical Society.

A total of 41 non-Aboriginal AOI were identified during background research and subsequently assessed. One of these places (B2G-19-H04) is now outside the impact assessment area and note that only 40 AOIs will be discussed in the following sections. The significance of the heritage elements recorded at each of these sites was assessed against the QH Act criteria and the threshold indicators provided by DESI (DEHP, 2013b).

The results of these assessments are presented in Table 19-14. This assessment determined that 21 of the AOI are of local heritage significance. A full significance assessment of each AOI is in Appendix Z: Non-Aboriginal Cultural Heritage Survey Report (Section 7).

TABLE 19-14 SUMMARY ASSESSMENT INDICATING CULTURAL HERITAGE SIGNIFICANCE THRESHOLD

| Site | Cultural heritage significance criteria | | | | | | | |
|------------|---|--------------|--------------|----------------------|--------------|----------------------|--------------|-----------------|
| | A—Historical | B—Rarity | C—Research | D—Representativeness | E—Aesthetic | F—Creative/technical | G—Social | H—Associational |
| B2G-19-H01 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H02 | Local | Not met | Local | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H03 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H04 | Local | Local | Not met | Local | Local | Not met | Local | Local |
| B2G-19-H05 | Not met | Not met | Not met | Not met | Local | Not met | Local | Local |
| B2G-19-H06 | Not met | Not met | Not met | Not met | Local | Not met | Local | Not met |
| B2G-19-H07 | Local | Not met | Not met | Not met | Local | Not met | Not met | Not met |
| B2G-19-H08 | Local | Not met | Not met | Not met | Not met | Not met | Local | Local |
| B2G-19-H09 | Not met | Not met | Not met | Not met | Not met | Not met | Local | Local |
| B2G-19-H10 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H11 | Not met | Not met | Not met | Not met | Local | Not met | Local | Not met |
| B2G-19-H12 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H13 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H14 | Local | Not met | Local | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H15 | Local | Local | Local | Not met | Local | Not met | Not met | Not met |
| B2G-19-H16 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H17 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |

Cultural heritage significance criteria

| Site | A—Historical | B—Rarity | C—Research | D—Representativeness | E—Aesthetic | F—Creative/technical | G—Social | H—Associational |
|------------|--------------|----------|------------|----------------------|-------------|----------------------|----------|-----------------|
| B2G-19-H18 | Not met | Not met | Not met | Not met | Local | Not met | Local | Not met |
| B2G-19-H20 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H21 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H22 | Local | Not met | Not met | Not met | Not met | Not met | Local | Not met |
| B2G-19-H23 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H24 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H25 | Local | Not met | Not met | Local | Not met | Not met | Local | Local |
| B2G-19-H26 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H27 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H28 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H29 | Local | Local | Not met | Local | Local | Not met | Not met | Not met |
| B2G-19-H30 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H31 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H32 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H33 | Local | Local | Local | Not met | Not met | Not met | Not met | Not met |
| B2G-19-H34 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-21-H02 | Not met | Not met | Local | Not met | Not met | Not met | Local | Not met |
| B2G-21-H03 | Local | Not met | Local | Not met | Not met | Not met | Not met | Not met |
| B2G-21-H04 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-21-H09 | Local | Not met | Not met | Not met | Not met | Not met | Local | Not met |
| B2G-21-H10 | Local | Not met | Local | Not met | Not met | Not met | Not met | Not met |
| B2G-21-H12 | Not met | Not met | Not met | Not met | Not met | Not met | Not met | Not met |
| B2G-21-H13 | Local | Not met | Local | Not met | Local | Not met | Local | Not met |
| B2G-21-H14 | Local | Not met | Local | Not met | Not met | Not met | Not met | Not met |

19.5 Potential impacts

This section provides a discussion of the potential impacts that may occur to heritage places or sites as a consequence of project activities, as described in Chapter 5: Project Description.

The effects of direct or indirect impacts are measured in terms of the extent to which they alter the heritage values of a cultural heritage place.

19.5.1 Aboriginal heritage

The identification of Aboriginal cultural heritage and assessment of potential impacts will occur in consultation with the relevant Aboriginal Parties and in accordance with the applicable approved CHMP developed with the relevant Aboriginal Party in accordance with the duty of care requirements of Section 23 of the ACH Act.

The relevant approved CHMP will contain processes to manage Aboriginal cultural heritage and the impacts on Aboriginal cultural heritage resulting from Project activities. Any CHMP developed for the Project is confidential and sensitive in nature and, therefore, no further details on content can be provided. Regardless, the broad activity types defined in the ACH Act Duty of Care Guidelines provides general guidance on the potential for harm to be caused to Aboriginal cultural heritage.

The Duty of Care Guidelines recognise that it is unlikely that Aboriginal heritage will be harmed where:

- ▶ The proposed activity is on an area subject to previous significant ground disturbance and the proposed activity will not create additional disturbance, or
- ▶ The impact of the proposed activity is unlikely to cause any additional harm to Aboriginal heritage than that which has already occurred.

Proposed activities that do not fit these descriptions have the potential to directly (e.g. excavation) or indirectly (e.g. changes to views, sounds, dust or smells) harm Aboriginal heritage, if present.

It is recognised that the views of the Aboriginal Party for an area are key in helping to identify and assess the significance of Aboriginal heritage. For that reason, impacts to Aboriginal heritage will be assessed in ongoing consultation with the relevant Aboriginal Parties and Project works undertaken in accordance with a relevant approved CHMP developed with the relevant Aboriginal Party. Section 23 of the ACH Act provides that a person who carries out an activity is taken to have complied with the cultural heritage duty of care if the person is acting under an approved CHMP that applies to the Aboriginal heritage.

19.5.2 Non-Aboriginal heritage

19.5.2.1 Assessing sensitivity

The degree of impact that an activity will have on a heritage place is partly a factor of the nature of the place, the place's heritage significance and the potentially impacting process. Of the 41 AOI assessed for this Project (1 AOI now sits outside the impact assessment area), 21 have been determined to be of local heritage significance. An assessment of the sensitivity of each of these 21 heritage places is in Table 19-15 in accordance with the methodology described in Section 19.3.4.3.

TABLE 19-15 SENSITIVITY OF IDENTIFIED HERITAGE SITES WITHIN THE IMPACT ASSESSMENT AREA

| Site ID | Description | Significance ¹ | Number of criteria met ² | Sensitivity ³ |
|------------|--|---------------------------|-------------------------------------|--------------------------|
| B2G-19-H02 | Gibinbell shearing complex | Local | 2 | Moderate |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | Local | 6 | Moderate |
| B2G-19-H05 | ANZAC Memorial Garden | Local | 3 | Moderate |
| B2G-19-H06 | Cancer charity tree | Local | 2 | Low |
| B2G-19-H07 | Church (former) | Local | 2 | Moderate |
| B2G-19-H08 | Yelarbon Mill 1 | Local | 3 | Moderate |
| B2G-19-H09 | Yelarbon Mill 2 | Local | 2 | Low |
| B2G-19-H11 | Yelarbon railway complex | Local | 2 | Low |
| B2G-19-H14 | Homestead complex | Local | 2 | Moderate |
| B2G-19-H15 | Homestead complex | Local | 4 | Moderate |
| B2G-19-H18 | Lookout | Local | 2 | Low |
| B2G-19-H22 | Protest public art | Local | 2 | Moderate |
| B2G-19-H25 | Pampas Memorial Hall | Local | 4 | Moderate |
| B2G-19-H29 | Brookstead Station building (relocated) | Local | 4 | Moderate |
| B2G-19-H33 | Homestead complex | Local | 3 | Moderate |
| B2G-21-H02 | Yelarbon cemetery | Local | 2 | Moderate |
| B2G-21-H03 | Avonlea homestead complex | Local | 2 | Low |
| B2G-21-H09 | Brookstead Hotel | Local | 2 | Low |
| B2G-21-H10 | House and windmill complex | Local | 2 | Low |
| B2G-21-H13 | Green Hills Hotel complex | Local | 4 | Moderate |
| B2G-21-H14 | Fairvale homestead complex | Local | 2 | Low |

Table notes:

1 As defined in Table 19-4.

2 As defined in Section 35 of the QH Act. Refer Table 19-3.

3 As defined in Table 19-5.

19.5.2.2 Potential impacts and magnitude of change

Direct impacts

Direct impacts to cultural heritage places or sites are most likely to occur during site preparation as a part of the construction works stage. At this time, clearing and stripping activities may require the demolition of heritage structures and the disturbance of archaeological sites. The heritage places that are within the Project footprint are listed in Table 19-16 along with the potential nature of impact and magnitude of change.

TABLE 19-16 HERITAGE PLACES AT RISK OF DIRECT IMPACT

| Site ID | Description | Potential impact | Likely magnitude of change |
|------------|--|--|----------------------------|
| B2G-19-H02 | Gibinbell shearing complex | Removal of shearing shed and associated yards, disturbance of archaeological deposits | Major |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | None Project footprint moved to avoid place | None |
| B2G-19-H05 | ANZAC Memorial Garden | None Project footprint moved to avoid place | None |
| B2G-19-H06 | Cancer charity tree | Removal of tree | Major |
| B2G-19-H09 | Yelarbon Mill 2 | Removal of mill | Major |
| B2G-19-H11 | Yelarbon railway complex | Removal of remaining station elements (excluding silos) | Negligible |
| B2G-19-H22 | Protest public art | Removal of installation | Major |
| B2G-19-H25 | Pampas Memorial Hall | Removal of building | Major |
| B2G-21-H09 | Brookstead Hotel | Inadvertent damage from machinery movement | Low |
| B2G-21-H10 | House and windmill complex | Inadvertent damage from machinery movement, disturbance of archaeological deposits | Low |
| B2G-21-H13 | Green Hills Hotel complex | Disturbance of archaeological deposits, destruction of marked and unmarked graves, removal of yards, and posts | Major |

Indirect impacts

Indirect impacts may occur during any stage of the Project if construction or operation activities result in alteration of view, changes in hydrology that increase flood risk, or generation of excessive dust, noise or vibration that affects heritage structures. Sites at risk of indirect impacts are listed in Table 19-17, along with the potential nature of impact and magnitude of change.

TABLE 19-17 HERITAGE PLACES AT RISK OF INDIRECT IMPACT

| Site ID | Description | Potential impact | Likely magnitude of change |
|------------|--|--|----------------------------|
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | Dust and vibration from construction and operation may accelerate dilapidation. Construction may disrupt community events through noise or changes to access. Existing high probably for flooding. No predicted change to flood risk. | Medium |
| B2G-19-H05 | ANZAC Memorial Garden | Dust and vibration from construction and operation may impact gardens. Nearby excavation may impact tree roots. Construction may disrupt community events through noise or changes to access. Existing high probably for flooding. No predicted change to flood risk. | Medium |

| Site ID | Description | Potential impact | Likely magnitude of change |
|------------|---|---|----------------------------|
| B2G-19-H07 | Church (former) | Dust and vibration from construction and operation may accelerate dilapidation. Structure is already in a poor condition and is vulnerable to damage. Church appears derelict and works are unlikely to disrupt community use. Existing high probably for flooding. Slight predicted increase in flood level (<0.01 m) and length of inundation (<1 hour). However, water will not enter the building and no additional impact is anticipated. | Medium |
| B2G-19-H08 | Yelarbon Mill 1 | Dust and vibration from construction and operation may accelerate dilapidation of buildings. However, buildings are already subject to such impacts as it is an operating industrial site. Existing high probably for flooding. Slight predicted increase in flood level and length of inundation, but no additional impact anticipated. | Negligible |
| B2G-19-H11 | Yelarbon railway complex | Damage to silo art through dust or accidental collision. Existing high probably for flooding. Slight predicted increase in flood level (<0.01 m) and length of inundation (<1 hour) at silos, but no additional impact anticipated. | Low |
| B2G-19-H14 | Homestead complex | Dust and vibration from construction and operation may accelerate dilapidation of any remaining structures. Existing high probably for flooding. Slight predicted increase length of inundation (<2 hours), but water will not enter the building and no additional impact anticipated. | Medium |
| B2G-19-H15 | Homestead | Dust and vibration from construction and operation may accelerate dilapidation. Structure is already in a poor condition and is vulnerable to damage. Existing high probability for flooding. Predicted increases in flood level (<0.5 m), length of inundation (<3 hours) and velocity (<0.8 m/s). Increased flood risk, especially changing velocity, may damage fragile building foundations, causing additional heritage impact. | Medium |
| B2G-19-H18 | Lookout | View may be altered. However, since the current view is of an industrial site, little substantive change is anticipated. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Low |
| B2G-19-H29 | Brookstead Station building (relocated) | Dust from construction and operation may accelerate dilapidation. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Low |
| B2G-19-H33 | Homestead complex | Dust and vibration from construction and operation may accelerate dilapidation. Some structures are already in a poor condition and are vulnerable to damage. | Medium |
| B2G-21-H02 | Yelarbon Cemetery | Dust and vibration from construction and operation may accelerate dilapidation. Construction may disrupt community events through noise or changes to access. Existing low probability for flooding. Predicted slight increase in flood level (<0.2 m) and length of inundation (10 hours). Increased flooding risk, particularly length of inundation, has potential to cause community distress by hindering access to the cemetery. Additional damage to heritage fabric unlikely. | Low |
| B2G-21-H03 | Avonlea homestead complex | Dust and vibration from construction and operation may accelerate dilapidation. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Medium |

| Site ID | Description | Potential impact | Likely magnitude of change |
|------------|----------------------------|--|----------------------------|
| B2G-21-H09 | Brookstead Hotel | Dust and vibration from construction and operation may accelerate dilapidation. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Medium |
| B2G-21-H10 | House and windmill complex | Dust and vibration from construction and operation may accelerate dilapidation. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Medium |
| B2G-21-H13 | Green Hills Hotel complex | Dust and vibration from construction and operation may accelerate dilapidation. No probability for flooding. No predicted change to flood risk and no impact anticipated. | Medium |
| B2G-21-H14 | Fairvale homestead complex | Dust and vibration from construction and operation may accelerate dilapidation. | Medium |

19.6 Mitigation measures

The accepted approach for managing impacts on heritage places is to avoid wherever possible, minimise as far as is practical, and then mitigate where avoidance and minimisation is not possible (ICOMOS, 2011).

This section describes the measures that either have been, or will be, adopted by the Project to avoid, minimise or mitigate potential impacts on heritage places. In the case of local heritage places, regard will be given to the provisions of the local planning scheme, where possible, during detailed design and construction planning. Although the Project is exempt from such requirements, planning schemes provide a benchmark of the heritage protections expected by the local community.

19.6.1 Mitigation through the revised reference design

Development of the reference design for the Project has progressed in parallel with the impact assessment process. As a consequence, design solutions for avoiding, minimising or mitigating impacts have been incorporated into the revised reference design as appropriate and where possible.

Mitigation measures and controls that have been factored into the design, or otherwise implemented during the development of the revised reference design for the Project are summarised in Table 19-18.

TABLE 19-18 INITIAL MITIGATION MEASURES OF RELEVANCE TO CULTURAL HERITAGE

| Aspect | Standard mitigation measures |
|------------------------------|---|
| All heritage | <ul style="list-style-type: none"> ▶ The Project alignment has been co-located with existing rail and road infrastructure, where possible, minimising the need to develop land that has not previously been subject to disturbance for transport infrastructure purposes and minimise the number of impacts to existing structures. ▶ The assessment of alternative alignment options has been conducted using multi-criteria analysis, with the presence and proximity of known heritage places a criterion within the assessment. ▶ The Project footprint has been established to provide the area required to safely and efficiently construct and operate the Project. |
| Aboriginal cultural heritage | <ul style="list-style-type: none"> ▶ The Project alignment has been positioned to minimise the number of crossings of watercourses and areas of remnant vegetation, which are typically high-risk areas for Aboriginal cultural heritage. ▶ CHMP to be developed in accordance with the requirements of Part 7 of the ACH Act and the <i>Cultural Heritage Management Plan Guidelines</i> (DATSIP, 2005). ▶ Consideration has been given to all forms of tangible and intangible Aboriginal cultural heritage, and the identification and management of these heritage values is occurring in consultation with the relevant Aboriginal Parties. Due to the confidential and sensitive nature of these discussions and documents, no further information can be included in the revised draft EIS. ▶ ARTC has commenced work with local Aboriginal Parties and Indigenous training and employment service providers to develop employment and training strategies for Indigenous job seekers. |

19.6.2 Proposed mitigation measures

To manage and mitigate Project impacts in relation to cultural heritage, mitigation measures have been developed for implementation in future stages of Project delivery. These mitigation measures have been developed to address Project-specific issues and potential opportunities, and are detailed in this section, separated into:

- ▶ Overarching mitigation measures (applicable to both Aboriginal and non-Aboriginal heritage)
- ▶ Aboriginal heritage
- ▶ Non-Aboriginal heritage.

Each section identifies the relevant Project stage and the mitigation and management measures. The measures have then been factored into the assessment of residual significance, as outlined in Section 19.7.

Chapter 24: Draft Outline Environmental Management Plan provides further context and the framework for implementing these mitigation and management measures.

19.6.2.1 Overarching mitigation measures

A series of mitigation and management measures have been developed as part of a Project-wide response to potential heritage impacts. These overarching measures are summarised in Table 19-19.

TABLE 19-19 OVERARCHING MITIGATION AND MANAGEMENT MEASURES OF RELEVANCE TO ALL HERITAGE

| Stage | Mitigation and management measures |
|-----------------|---|
| Detailed design | <ul style="list-style-type: none">▶ Undertake consultation with relevant heritage asset owners about the Project alignment and proposed activities including level of risk to the identified heritage and, if relevant, develop site specific design management measures with the asset owner/government agency.▶ Design to avoid or minimise direct and indirect impacts to identified sites/items of Aboriginal and non-Aboriginal heritage significance, where practicable.▶ Design will be developed and refined in response to the outcomes of additional heritage surveys undertaken through the detailed design stage to avoid or minimise direct impacts to identified items/sites of historic heritage significance where possible and practical to do so▶ Surveys will be conducted during the detailed design stage, ahead of ground disturbing works where sections of original rail infrastructure may be impacted.▶ Construction planning undertaken through the detailed design stage of the Project will avoid or minimise directly impacting on identified sites/items of heritage significance where practicable. If items/sites cannot be avoided, appropriate mitigations to be put in place.▶ The planning will seek to avoid vibration or other indirect impacts on identified sites/items of heritage significance within a 150 m buffer of proposed works where practicable. If items/sites cannot be avoided, appropriate mitigations to be developed through the detailed design stage (see following tables for further detail).▶ All heritage assessments and mitigations are to be completed by suitably qualified professionals, in consultation with Indigenous or other stakeholders as required.▶ A Heritage Management Plan (as a component of the Construction Environmental Management Plan (CEMP)) will be developed during detailed design for the Project and will detail mitigation and management measures to be implemented during construction in relation to cultural heritage. The Heritage Management Plan will be separate to the Aboriginal CHMP for the Project and will relate to all heritage aspects of importance to all stakeholders. It will include requirements for:<ul style="list-style-type: none">▶ unexpected finds▶ human remains procedures▶ site induction▶ training▶ heritage monitors▶ inspections▶ audits▶ corrective actions▶ notification and classification of cultural heritage incidents▶ record keeping▶ monitoring and performance objectives for handover on completion of construction. |

| Stage | Mitigation and management measures |
|---|--|
| | <ul style="list-style-type: none"> ▶ Specific conservation management requirements for non-Aboriginal sites/items that cannot be avoided during construction, as agreed with owners or managers of each site/item, particularly the following sites that may experience a major magnitude of direct change (Table 19-16): <ul style="list-style-type: none"> ▶ Gibinbell shearing complex (B2G-19-H02) ▶ Cancer charity tree (B2G-19-H06) ▶ Yelarbon Mill 2 (B2G-19-H09) ▶ Protest public art (B2G-19-H22) ▶ Pampas Memorial Hall (B2G-19-H25) ▶ Green Hills Hotel complex (B2G-21-H13). ▶ Communication protocols for informing staff and contractors of the nature and location of known heritage items and the management measures in place relevant to the heritage items, detailing the locations on site maps ▶ An unexpected finds procedure, including assessment by a suitably qualified person and notification obligations under the applicable heritage legislation ▶ Procedures for responding to encounters with potential burial sites or potential human skeletal material in accordance with legislative requirements ▶ Identification of work areas to control clearing, earthworks, laydown and storage, plant and equipment maintenance, and construction traffic movements to avoid 'no-go areas'. ▶ Clearing extents/site boundary/limit of works are consistent with the detailed design development and marked with flagging or marking tape, signage or other suitable means to delineate 'no go areas'. ▶ Clearing extents are mapped and surveyed to be limited to that designated by the detailed design construction review process and within the Project footprint. |
| Pre-construction activities and early works, construction works and commissioning | <ul style="list-style-type: none"> ▶ Where impacts can be avoided to known Aboriginal or non-Aboriginal heritage, appropriate precautionary measures, such as informing relevant staff and contractors of the nature and location of the items and need to avoid impacts, detailing location on site maps. ▶ Construction activities will avoid disruption to commemorative and other community activities wherever possible. ▶ Temporary protective barricading will be installed around heritage places or artefacts that are located within 20 m of the Project footprint and are to be retained. These areas are to be established as 'no go areas' and mapped on all Project plans. Temporary protective barricading will include high visibility ground markers visible to personnel on foot and operating vehicles and machinery. ▶ Works will not be performed on potential heritage items without required approvals and appropriate management plans in place. ▶ If a suspected Aboriginal or non-Aboriginal heritage item or site is identified, any works that may impact the item or site will stop, and the Unexpected Finds Procedure in the Heritage Management Plan as a component of the CEMP, will be followed. ▶ Any responses to chance finds will only be undertaken by archaeologists qualified and experienced in the relevant discipline. ▶ In the event of the discovery of human remains, all work in the area will cease, the find will be protected and the Queensland Police Service will be notified. All relevant Heritage Management Plan processes for the notification and management of human remains will be instigated. ▶ A heritage finalisation process will be initiated, including: <ul style="list-style-type: none"> ▶ An end of Project construction heritage audit ▶ The removal of any heritage exclusion zoning fencing, ensuring that on ground conditions remain the same as when fenced. |

| Stage | Mitigation and management measures |
|------------|---|
| Operations | <ul style="list-style-type: none"> ▶ Maintain a register of all known cultural heritage sites within the railway corridor and where applicable directly adjacent. Establish protocols as part of the existing management systems to ensure that works within proximity to these sensitive receptors have the relevant internal approvals and mitigation measures in place. For example: <ul style="list-style-type: none"> ▶ Potential for vibration impacts to heritage sites to be assessed prior to the undertaking of maintenance activities that have potential to result in vibratory impacts ▶ Pre- and post-condition structural surveys will be undertaken at all heritage buildings and structures when maintenance activities may result in exceedance of the structural damage vibration criteria relevant to the site (Chapter 16: Noise and Vibration) ▶ If impacts cannot be avoided, the following measures may be implemented: <ul style="list-style-type: none"> ▶ photographic and archival recording ▶ relocation ▶ archaeological monitoring ▶ repair. ▶ Limit additional disturbance, where possible. ▶ Conduct heritage assessments, where necessary, for new work beyond the extent of existing disturbances. |

19.6.2.2 Aboriginal cultural heritage

Aboriginal heritage will be protected and managed through agreed mitigation strategies after the survey of the Project footprint. This survey will be undertaken by the Aboriginal Parties in line with the terms and conditions of a relevant approved CHMP.

Table 19-20 specifies the mitigation and management measures that will be implemented to minimise the extent of impacts to Aboriginal heritage.

TABLE 19-20 ABORIGINAL HERITAGE MITIGATION AND MANAGEMENT MEASURES

| Stage | Mitigation and management measures |
|---|--|
| Pre-construction activities and early works, and construction works | <ul style="list-style-type: none"> ▶ Impacts to Aboriginal heritage will be managed through a relevant approved CHMP, in accordance with the ACH Act, which includes the following management measures: <ul style="list-style-type: none"> ▶ a cultural heritage induction for Project staff ▶ developing a cultural heritage awareness program ▶ provisions for managing unexpected finds of cultural material or sites (including burials). In accordance with a relevant approved CHMP, impacts on previously unregistered and unassessed items or places of cultural heritage significance may be mitigated by: <ul style="list-style-type: none"> – undertaking comprehensive cultural heritage surveys for Project activities – provisions for managing unexpected finds of cultural material/sites (including burials) – undertaking archaeological survey (including excavations where necessary) – generating survey reports to provide detailed assessment and management recommendations – assessing significance of any cultural heritage – recording (where Project activities may have a direct impact on cultural heritage values) – establishment of buffer zones – monitoring (during Project activities to ensure impacts to known cultural heritage are appropriately mitigated). |
| Operations | <ul style="list-style-type: none"> ▶ ARTC to develop a cultural heritage induction for ARTC staff, including contractors and subconsultants ▶ ARTC to develop a cultural heritage awareness program ▶ ARTC to implement procedures for managing unexpected finds of cultural material/sites (including burials) ▶ Where practicable, surface disturbance will be contained to areas that have been previously surveyed for cultural heritage. ▶ Where maintenance activities require surface disturbance beyond the previously surveyed area or outside an area where there is an approved CHMP, assessment will be conducted in accordance with the requirements of ACH Act. |

19.6.2.3 Non-Aboriginal heritage

Table 19-21 specifies the mitigation and management measures that will be implemented to minimise the extent of impacts to non-Aboriginal heritage. Table 19-22 outlines the location specific management and mitigation measures to be implemented for each heritage place.

TABLE 19-21 NON-ABORIGINAL HERITAGE MITIGATION AND MANAGEMENT MEASURES

| Stage | Mitigation and management measures |
|-----------------|--|
| Detailed design | <ul style="list-style-type: none"> ▶ Modelling for groundborne vibration will be updated as part of the detailed design stage to determine areas in which vibratory roller operation or other activities may result in exceedance of the structural damage vibration criteria in <i>DIN 4150-3:1999 Structural vibration—Effects of vibration on structures</i> (Deutsches Institut für Normung, 1999), and recommended in the <i>Transport Noise Management Code of Practice: Volume 2—Construction Noise and Vibration</i> (Department of Transport and Main Roads, 2023). Detailed design will assess a 150 m buffer area including additional heritage desktop reviews, survey and assessment, to determine if any further heritage places are at risk of impact. ▶ Building condition/dilapidation surveys will be undertaken at heritage buildings where the structural damage vibration criteria may be exceeded. Surveys will occur during the detailed design stage, before undertaking vibration generating works, with the potential for monitoring during the construction activities as per noise and vibration management plans. ▶ These places are to be confirmed during and following the completion of detail design, updated vibration modelling, and any necessary additional heritage assessments, but are expected to include: <ul style="list-style-type: none"> ▶ B2G-19-H04 Yelarbon & District Soldiers Memorial Hall ▶ B2G-19-H05 ANZAC Memorial Garden ▶ B2G-19-H07 Church (former) ▶ B2G-19-H08 Yelarbon Mill 1 ▶ B2G-19-H11 Yelarbon railway complex (silos only) ▶ B2G-19-H14 Homestead complex ▶ B2G-19-H15 Homestead ▶ B2G-19-H22 Protest public art ▶ B2G-19-H33 Homestead complex ▶ B2G-21-H03 Avonlea homestead complex ▶ B2G-21-H09 Brookstead Hotel ▶ B2G-21-H10 House and windmill complex ▶ B2G-21-H13 Green Hills Hotel complex ▶ B2G-21-H14 Fairvale homestead complex. ▶ The construction methodology will be developed during detailed design and tailored to limit vibration impacts to heritage listed structures, where possible (see construction works and commissioning section of this table for further detail of the implementation of the methodology). ▶ Condition/dilapidation surveys will be undertaken at heritage places that may be subject to increased flood risk due to Project works. If necessary, additional mitigations to be put in place as outlined in the rows below. ▶ These places are to be confirmed during and following the completion of detailed design, updated modelling and any necessary additional heritage assessments, but are expected to include: <ul style="list-style-type: none"> ▶ B2G-19-H15 Homestead ▶ B2G-21-H02 Yelarbon Cemetery. ▶ Areas of rail heritage potential that have not been previously assessed will be surveyed ahead during the detailed design stage. Surveys are to: <ul style="list-style-type: none"> ▶ identify and document any heritage values ▶ inform the development of specific management measures. ▶ Archaeological surveys will be undertaken at heritage sites that are subject to direct impacts and have the potential for archaeological deposits. These complexes are identified in Table 19-16 and are: <ul style="list-style-type: none"> ▶ Gibinbell shearing complex (B2G-19-H02) ▶ House and windmill complex (B2G-21-H10) ▶ Green Hills Hotel complex (B2G-21-H13). |

| Stage | Mitigation and management measures |
|---|--|
| | <ul style="list-style-type: none"> ▶ If warranted by results of archaeological survey and nature of impacts, archaeological investigations will be undertaken (see rows below). ▶ Where non-Aboriginal heritage sites cannot be avoided or impacts sufficiently minimised, consultation with the relevant heritage asset owner/government agency will be undertaken to identify and implement appropriate mitigation measures, such as: <ul style="list-style-type: none"> ▶ archival recording <ul style="list-style-type: none"> – undertake archival photographic recording in accordance with DEHP (2013c) <i>Guideline: Archival Recording of Heritage Places</i> – copies of archival records to be lodged with the John Oxley Library, and local libraries or historical societies as appropriate. ▶ Relocation <ul style="list-style-type: none"> ▶ relocation of heritage items is generally undesirable, as setting forms an intrinsic part of heritage value (ICOMOS (Australia) 2013) ▶ if impacts cannot be managed in any other way, it may be appropriate to relocate buildings or items of moveable heritage to another location, such as a local historical society. The approach for any such requirements will be defined in the Heritage Management Plan (as a component of the CEMP). ▶ Archaeological investigations: <ul style="list-style-type: none"> ▶ archaeological surface collection <ul style="list-style-type: none"> – collect archaeological artefacts on the ground's surface – depending on nature of site may be undertaken in conjunction with, or in place of, excavation ▶ archaeological excavation <ul style="list-style-type: none"> – Stage 1—test excavation to confirm subsurface deposit – Stage 2—salvage excavation of subsurface deposits (if required) ▶ Stage 3—prepare and finalise post excavation report and analysis, and recommend any further management measures (if required) ▶ Development of a Heritage Interpretation Plan during detailed design to promote heritage values of the Project footprint, including consideration of: <ul style="list-style-type: none"> ▶ Green Hills Hotel complex (B2G-21-H13) ▶ locations of early rail infrastructure including: <ul style="list-style-type: none"> – Kurumbul Station (B2G-19-H01) – Gibinbell Siding (B2G-19-H03) – Whetstone siding (B2G-19-H13) – Yandilla Station (B2G-19-H21) – Pampas Station (B2G-19-H24) – Brookstead Station (B2G-19-H28) – Cecilvale Station (B2G-19-H30) – Yarranlea Station (B2G-19-H31) – Murlaggan Station (B2G-19-H32). |
| Pre-construction activities and early works, construction works and commissioning | <ul style="list-style-type: none"> ▶ The construction methodology will be tailored to limit vibration impacts to heritage-listed structures. Where possible, vibration at heritage places to be kept below 2.5 millimetres per second (mm/s) in accordance with <i>DIN 4150-3:1999 Structural vibration - Effects of vibration on structures</i> (Deutsches Institut für Normung, 1999). ▶ Vibration will be monitored at heritage places where exceedances of 2.5 mm/s are possible. ▶ Where vibration exceedances occur, the construction activities will, where practicable, reduce impact, such as: <ul style="list-style-type: none"> ▶ using damped tips on rock-breakers ▶ using rock saws instead of blasting ▶ using excavators with grabs and rake attachments instead of chainsaws during clearing ▶ mulching cleared material at locations away from sensitive receptors ▶ avoiding onsite fabrication work, where practicable ▶ using alternatives to impact-pile driving, where possible, such as continuous flight, auger-injected piles, pressed-in preformed piles, auger-bored piles, impact-bored piles, or vibratory piles ▶ when piling, avoiding dynamic compaction using large tamping weights near sensitive and critical receptors, where practicable ▶ reducing energy per blow when piling (consider first whether this may result in prolonged exposure with no realised reduction in community disturbance). |

| Stage | Mitigation and management measures |
|------------|--|
| | <ul style="list-style-type: none"> ▶ Plant and equipment selection will be reviewed with a preference for adopting non-vibratory plant items near sensitive receptors, where feasible and reasonable. ▶ Appropriately sized plant and equipment will be selected for each construction task, such as vibratory compactors and rock excavation equipment. ▶ Construction activities will avoid disruption to commemorative and other community activities wherever possible. This includes ANZAC Day or Remembrance Day events at the Yelarbon & District Soldiers Memorial Hall (B2G-19-H04) and ANZAC Memorial Garden (B2G-19-H05), and to funerals at the Yelarbon Cemetery (B2G-21-H2). ▶ Any damage to heritage structures will be repaired in a way that seeks to conserve the heritage values of the place (the Burra Charter, Article 1.4 (ICOMOS (Australia), 2013)). ▶ Any recommendations of the Heritage Interpretation Plan associated with construction elements will be implemented. ▶ If warranted by results of pre-construction archaeological survey, archaeologists will monitor ground-breaking works to identify any subsurface deposits. |
| Operations | <ul style="list-style-type: none"> ▶ Potential for vibration impacts to heritage sites will be assessed before maintenance activities are undertaken. ▶ Pre- and post-condition structural surveys will be undertaken for all heritage buildings and structures where maintenance activities may result in exceedance of the structural damage vibration criteria in <i>DIN 4150-3:1999 Structural vibration - Effects of vibration on structures</i> (Deutsches Institut für Normung, 1999) and recommended in <i>Transport Noise Management Code of Practice: Volume 2 – Construction Noise and Vibration</i> (Department of Transport and Main Roads, 2023). |

TABLE 19-22 PROPOSED MITIGATION MEASURES FOR EACH HERITAGE PLACE

| Site ID | Description | Mitigation and management measures |
|------------|--|--|
| B2G-19-H01 | Kurumbul Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H02 | Gibinbell shearing complex | <ul style="list-style-type: none"> ▶ Avoid direct impacts to site, if practicable ▶ Archival recording of built elements ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If avoidance is not possible:</p> <ul style="list-style-type: none"> ▶ Archaeological survey to identify extent of shed, yards and any additional features ▶ If warranted by results of survey, conduct archaeological monitoring or excavation. |
| B2G-19-H03 | Gibinbell siding | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21 ▶ Where possible, plan works to avoid disruption to community events, particularly ANZAC Day or Remembrance Day commemorations. |
| B2G-19-H05 | ANZAC Memorial Garden | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21 ▶ Where possible, plan works to avoid disruption to community events, particularly ANZAC Day or Remembrance Day commemorations. |
| B2G-19-H06 | Cancer charity tree | <ul style="list-style-type: none"> ▶ Avoid direct impacts to site, if practicable. <p>If avoidance of direct impacts to site is not possible:</p> <ul style="list-style-type: none"> ▶ Consider relocation of tree and plaque within Yelarbon ▶ Consult with local community regarding suitable location. |
| B2G-19-H07 | Church (former) | <ul style="list-style-type: none"> ▶ Archival recording of built elements ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If indirect impacts cannot be appropriately managed:</p> <ul style="list-style-type: none"> ▶ Consider relocation of building within Yelarbon ▶ Engage heritage specialist to advise on conservation and relocation processes ▶ Consult with local community and building owner regarding suitable location ▶ Re-instate church in appropriate setting. |

| Site ID | Description | Mitigation and management measures |
|------------|---|--|
| B2G-19-H08 | Yelarbon Mill 1 | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If indirect impacts cannot be appropriately managed:</p> <ul style="list-style-type: none"> ▶ Archival recording of built elements. |
| B2G-19-H09 | Yelarbon Mill 2 | <ul style="list-style-type: none"> ▶ Avoid direct impacts to site, if practicable. <p>If avoidance of direct impacts to site is not possible:</p> <ul style="list-style-type: none"> ▶ Undertake archival recording of built elements. |
| B2G-19-H11 | Yelarbon railway complex | <ul style="list-style-type: none"> ▶ Avoid damage to silo art ▶ Manage indirect impacts in accordance with measures in Table 19-21. |
| B2G-19-H13 | Whetstone siding | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. ▶ Any signage installed to identify the previous location of the Whetstone siding can be located on an area beyond the Project footprint, in consultation with the parties responsible for the installation of the signage. |
| B2G-19-H14 | Homestead Complex | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If indirect impacts cannot be appropriately managed:</p> <ul style="list-style-type: none"> ▶ Undertake archival recording of built elements ▶ Consider relocation of heritage dwellings to residential area with heritage or character protection provisions. |
| B2G-19-H15 | Homestead Complex | <ul style="list-style-type: none"> ▶ Undertake archival recording of built elements ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If any direct impacts are anticipated:</p> <ul style="list-style-type: none"> ▶ Undertake an archaeological survey to identify extent of heritage features ▶ If warranted by results of survey, conduct archaeological monitoring or excavation |
| B2G-19-H18 | Lookout | <ul style="list-style-type: none"> ▶ Archival recording of current view. |
| B2G-19-H21 | Yandilla Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H22 | Protest public art | <ul style="list-style-type: none"> ▶ Avoid site and preserve in situ. <p>If preservation of site is not possible, ARTC to consider:</p> <ul style="list-style-type: none"> ▶ Relocation and use in interpretative information on Inland Rail and the Project ▶ Donation to heritage or art bodies ▶ Archival recording and demolition. <p>In all instances, ARTC is to discuss the disposition of the installation with the original artist prior to any action.</p> |
| B2G-19-H24 | Pampas Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H25 | Pampas Memorial Hall | <ul style="list-style-type: none"> ▶ Avoid site, if possible. <p>If avoidance of site is not possible:</p> <ul style="list-style-type: none"> ▶ Undertake archival recording of the built element ▶ Consider relocation of building to appropriate location in Pampas ▶ Consult with local community regarding suitable location. |
| B2G-19-H28 | Brookstead Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H29 | Brookstead Station building (relocated) | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If indirect impacts cannot be appropriately managed:</p> <ul style="list-style-type: none"> ▶ Undertake archival recording of built elements ▶ Consider relocation of building to appropriate location in Brookstead ▶ Consult with local community regarding suitable location. |

| Site ID | Description | Mitigation and management measures |
|------------|----------------------------|--|
| B2G-19-H30 | Cecilvale Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H31 | Yarranlea Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H32 | Murlaggan Station | <ul style="list-style-type: none"> ▶ Recommended for inclusion in the Heritage Interpretation Plan to be prepared during detailed design. |
| B2G-19-H33 | Homestead complex | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If indirect impacts cannot be appropriately managed:</p> <ul style="list-style-type: none"> ▶ Archival recording of built elements ▶ Consider relocation of dwelling to a residential area with heritage or character protection provisions. <p>If any direct impacts are anticipated:</p> <ul style="list-style-type: none"> ▶ Archaeological survey to identify extent of heritage features ▶ If warranted by results of survey, conduct archaeological monitoring or excavation |
| B2G-21-H02 | Yelarbon Cemetery | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21 ▶ Where possible, plan works to avoid disruption to funereal or commemorative events. |
| B2G-21-H03 | Avonlea homestead complex | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. |
| B2G-21-H04 | Multiple structures | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. |
| B2G-21-H09 | Brookstead Hotel | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. |
| B2G-21-H10 | House and windmill complex | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. |
| B2G-21-H13 | Green Hills Hotel complex | <ul style="list-style-type: none"> ▶ Avoid direct impacts to site, if practicable ▶ Manage indirect impacts in accordance with measures in Table 19-21. <p>If avoidance is not possible:</p> <ul style="list-style-type: none"> ▶ Undertake an archaeological survey of the portion of the site situated within the Project footprint (including a 20 m buffer) to identify additional significant features or deposits ▶ Notify DESI if archaeology of potential State significance is uncovered ▶ If warranted by results of survey, conduct archaeological monitoring or excavation ground-penetrating radar survey of the area within 20 m of the Maria Tibbs grave to identify potential unmarked grave locations ▶ Undertake an archaeological test excavation to confirm the location of potential unmarked graves identified by ground penetrating radar ▶ Archaeologically excavate the grave of Maria Tibbs and any unmarked burials and: <ul style="list-style-type: none"> ▶ in the absence of living family, consult the local community about this process ▶ preliminary discussions with History Pittsworth have identified the Pittsworth cemetery as the preferred location for reinterment ▶ reinterment on public land provides the greatest opportunity for interpretation and enhancement of local history values, and presents the best heritage outcome ▶ consult Toowoomba Regional Council about legal or other requirements ▶ Develop heritage interpretation information for the reinterment site and a suitable, publicly accessible location near the Green Hills Hotel complex. |
| B2G-21-H14 | Fairvale homestead complex | <ul style="list-style-type: none"> ▶ Manage indirect impacts in accordance with measures in Table 19-21. |

19.7 Impact assessment summary

19.7.1 Aboriginal cultural heritage

The location of pre-construction activities and early works, construction works and permanent infrastructure will, where practicable, be positioned to avoid any known 'no go areas' identified through further cultural heritage assessment. ARTC will engage with the relevant Aboriginal Parties to develop an approach to avoid, or otherwise manage works in proximity to the no go areas. Where ARTC considers it to be impractical to change the location of Project activities to avoid a known restricted area, the appropriate management measures set out in Table 19-20 and a relevant approved CHMP will be implemented.

19.7.2 Non-Aboriginal heritage

The significance of impacts to each heritage place are assessed in Table 19-23 using the criteria established in the *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS, 2011) (Section 19.3.4.4).

TABLE 19-23 INITIAL AND RESIDUAL IMPACT SIGNIFICANCE ASSESSMENT

| Site ID | Description | Sensitivity | Initial significance ¹ | |
|------------|--|-------------|-----------------------------------|--------------|
| | | | Magnitude | Significance |
| B2G-19-H02 | Gibinbell shearing complex | Moderate | Major | Moderate |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | Moderate | Low | Slight |
| B2G-19-H05 | ANZAC Memorial Garden | Moderate | Low | Slight |
| B2G-19-H06 | Cancer charity tree | Low | Major | Moderate |
| B2G-19-H07 | Church (former) | Moderate | Medium | Moderate |
| B2G-19-H08 | Yelarbon Mill 1 | Moderate | Negligible | Slight |
| B2G-19-H09 | Yelarbon Mill 2 | Low | Major | Moderate |
| B2G-19-H11 | Yelarbon railway complex | Low (silos) | Low | Slight |
| B2G-19-H14 | Homestead complex | Moderate | Medium | Moderate |
| B2G-19-H15 | Homestead complex | Moderate | Medium | Moderate |
| B2G-19-H18 | Lookout | Low | Low | Slight |
| B2G-19-H22 | Protest public art | Moderate | Major | Moderate |
| B2G-19-H25 | Pampas Memorial Hall | Moderate | Major | Moderate |
| B2G-19-H29 | Brookstead Station building (relocated) | Moderate | Low | Slight |
| B2G-19-H33 | Homestead complex | Moderate | Medium | Moderate |
| B2G-21-H02 | Yelarbon Cemetery | Moderate | Low | Slight |
| B2G-21-H03 | Avonlea homestead complex | Low | Medium | Slight |
| B2G-21-H09 | Brookstead Hotel | Low | Medium | Slight |
| B2G-21-H10 | House and windmill complex | Low | Medium | Slight |
| B2G-21-H13 | Green Hills Hotel complex | Moderate | Major | Moderate |
| B2G-21-H14 | Fairvale homestead complex | Low | Medium | Slight |

Table note:

¹ Includes implementation of initial mitigation measures specified in Table 19-18.

19.8 Residual impact

The residual (fully mitigated) impacts to each non-Aboriginal heritage place are assessed in Table 19-24 using the criteria established in the *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS, 2011) (Section 19.3.4.4).

TABLE 19-24 RESIDUAL IMPACT SIGNIFICANCE ASSESSMENT

| Site ID | Description | Sensitivity | Residual significance ¹ | |
|------------|--|-------------|------------------------------------|--------------|
| | | | Magnitude | Significance |
| B2G-19-H02 | Gibinbell shearing complex | Moderate | Low | Slight |
| B2G-19-H04 | Yelarbon & District Soldiers Memorial Hall | Moderate | Negligible | Neutral |
| B2G-19-H05 | ANZAC Memorial Garden | Moderate | Negligible | Neutral |
| B2G-19-H06 | Cancer charity tree | Low | Low | Slight |
| B2G-19-H07 | Church (former) | Moderate | Low | Slight |
| B2G-19-H08 | Yelarbon Mill 1 | Moderate | Negligible | Slight |
| B2G-19-H09 | Yelarbon Mill 2 | Low | Low | Slight |
| B2G-19-H10 | Petrol station | Low | Negligible | Neutral |
| B2G-19-H11 | Yelarbon railway complex | Low (silos) | Negligible | Neutral |
| B2G-19-H14 | Homestead complex | Moderate | Low | Slight |
| B2G-19-H15 | Homestead complex | Moderate | Low | Slight |
| B2G-19-H18 | Lookout | Low | Negligible | Neutral |
| B2G-19-H22 | Protest public art | Moderate | Medium | Slight |
| B2G-19-H25 | Pampas Memorial Hall | Moderate | Low | Slight |
| B2G-19-H29 | Brookstead Station building (relocated) | Moderate | Negligible | Slight |
| B2G-19-H33 | Homestead complex | Moderate | Low | Slight |
| B2G-21-H02 | Yelarbon Cemetery | Moderate | Negligible | Neutral |
| B2G-21-H03 | Avonlea homestead complex | Low | Negligible | Neutral |
| B2G-21-H09 | Brookstead Hotel | Low | Negligible | Neutral |
| B2G-21-H10 | House and windmill complex | Low | Negligible | Neutral |
| B2G-21-H13 | Green Hills Hotel complex | Moderate | Medium | Moderate |
| B2G-21-H14 | Fairvale homestead complex | Low | Negligible | Neutral |

Table note:

¹ Assessment of residual significance once the mitigation measures identified in Table 19-19, Table 19-21 and Table 19-22 have been applied.

19.9 Conclusions

The cultural heritage assessment addresses the Aboriginal and non-Aboriginal cultural heritage values of the Project, describing the Project's existing cultural heritage environment, potential impacts, proposed mitigation measures and provides a significance impact assessment. All Project construction works will be undertaken in accordance with a Heritage Management Plan (as a component of the CEMP).

Further, all Project works will be undertaken in accordance with a relevant approved CHMP developed with the relevant Aboriginal Party, and the ACH Act.

The assessment of non-Aboriginal heritage values identified 40 AOI within the impact assessment area of which 21 are of local heritage significance. The assessment of impacts found that, with appropriate mitigation measures, Project impacts would be moderate for one heritage place (B2G-21-H13, Green Hills Hotel complex), and neutral (no impact) or slight for the remainder. A Heritage Interpretation Plan will also be developed during detailed design to promote heritage values of the Project footprint.