

Visual Impact Addendum to the Assessment Report

Wandoan Coal Project
Southern coal seam methane
water supply pipeline



A report prepared by

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Glossary

<i>Contrast</i>	The degree to which a development component differs visually from its landscape setting
<i>Integration</i>	The degree to which a development component can be blended into the existing landscape without necessarily being screened from view
<i>Screen</i>	The degree to which a development element is unseen due to intervening landscape elements such as topography or vegetation.
<i>Visual Effect</i>	A measure of the visual interaction between a development and the landscape setting within which it is located
<i>Visual Impact</i>	A measure of a joint consideration of both visual sensitivity and visual effect that considered together determine the visual impact of a development
<i>Visual Sensitivity</i>	The degree to which a change to the landscape will be perceived in an adverse way
<i>VMU</i>	Visual Management Unit is a landscape area with similar visual characteristics

Executive summary

The Wandoan Coal Project proposes to develop thermal coal resources situated immediately west of the Wandoan township, located in Dalby Regional Council. That Project's requirement for raw water for processing purposes requires such supplies to be sourced from areas outside the MLA areas. The southern coal seam methane (CSM) water pipeline is one of two potential raw water supply options.

This Addendum to the EIS technical report evaluates the visual implications of the modifications to the northern portion of the proposed southern coal seam methane (CSM) water pipeline, and should be read in conjunction with the EIS Visual Impact Assessment Report of October 2008 (TR 19-1-V2.5). The modifications to the pipeline alignment extend from the northern end of Baileys Road, from the intersection of Baileys and Giligulgul Roads, the proposed pipeline proceeds in a north-east direction within the road reserve. Where Giligulgul Road intersects with the Leichhardt Highway, the alignment turns into the road reserve of the Leichhardt Highway on the western side and progresses in a northerly direction until the south-eastern corner of Lot 3 FT695. At this point, the proposed alignment traverses this allotment in a northerly direction to enter the MLA areas at the south-east corner.

The visual assessment of the proposed pipeline evaluated the condition of the existing landscape and the visual character of the proposed construction of the pipeline to determine visual effects. The visual sensitivity of views on to the pipeline was considered in terms of general land use and distances of potential sensitive receptors to the proposed pipeline. A consideration of these two factors, visual effect and sensitivity, determined impact levels.

Although high visual effects may be created during the construction process, this is limited in time and even views from sensitive receptors will experience little long-term effect or impact. The greatest visual effect will be created where there is a need to clear shrub and or tree cover. However this will be minimised if existing easements adjacent to the highway and open fields can be used.

Visual impact for this type of project is easily mitigated. A range of landscape mitigation strategies have been developed to ensure that significant visual impacts are avoided. Treatments relate to the easement. However if such treatment is not sufficient in exceptional circumstances, treatment can be carried out at the point of viewing, likely to be a homestead adjacent to the pipeline easement. A limited number of air valves will be an above ground element but will only have localised effects, because of their small scale, that are easily mitigated.

1. INTRODUCTION

For the Wandoan Coal Project, the Wandoan Joint Venture (WJV) proposed to develop thermal coal resources situated immediately west of the Wandoan township, located in the Dalby Regional Council area. The Project will include on-site coal handling and processing which will require a constant and reliable water supply. Integral was commissioned by Parsons Brinckerhoff to prepare a Visual Impact Assessment for the proposed Southern Coal Seam Methane (CSM) Water Supply Pipeline route for the EIS.

After the EIS was submitted for public comment an Addendum to the EIS Technical Report was prepared. This report has considered submission comments received on the EIS, regarding visual amenity and impact, as well as changes to the proposed route of the pipeline.

1.1 Project background

Refer to the EIS technical report titled *Visual Impact Assessment Report, Wandoan Coal Project, Southern coal seam methane water supply pipeline*, TR 19-1-V2.5.

1.2 Description of study area

Refer to the EIS technical report titled *Visual Impact Assessment Report, Wandoan Coal Project, Southern coal seam methane water supply pipeline*, TR 19-1-V2.5, for a comprehensive description of the study area.

The pipeline route alignment has altered since the EIS was submitted. The proposed route commences at the Condamine Power Station and progresses in a northerly direction to an existing high voltage transmission line easement. A turn to the west is then made and the pipeline travels along the existing transmission line easement until it intersects with the Leichhardt Highway. A turn to the north is made and the proposed pipeline travels along the eastern side of the road reserve of the Leichhardt Highway, crossing the highway into the road reserve of Baileys Road and continuing north. At the intersection of Baileys and Giligulgul Roads, the proposed pipeline proceeds in a north-east direction within the road reserve. Where Giligulgul Road intersects with the Leichhardt Highway, the alignment turns into the road reserve of the Leichhardt Highway on the western side and progresses in a northerly direction until the south-eastern corner of Lot 3 FT695. At this point, the proposed alignment traverses this allotment in a northerly direction to enter the MLA areas at the south-east corner. Figure 1-1 depicts the entire pipeline route, including the revised northern portion.

This route differs from the route initially assessed in Volume 2 of the EIS, particularly in the northern section between the northern end of Baileys Road to the MLA area boundary. These differences have been assessed and included in this report.

1.3 This report

This report outlines the visual assessment of elements of the Southern Pipeline Route that has been modified since the release of the EIS and is a technical report supporting the supplementary EIS. The report considers only the elements that are likely to have a significant visual impact and not other elements that may have minor and insignificant visual effects and impacts and or have been considered appropriately in the original visual assessment report.

The methodology used in this report to assess visual effect, visual sensitivity and impact is the same as that used and described in the initial report; see EIS Volume 1, Chapter 19 Visual Amenity technical report TR 19-1-V2.5, section 2.0.

Similarly the existing environment has been described in the Visual Amenity technical report TR 19-1-V2.5, section 3.0 and there has been no need to extend or enhance that description in this report, except where the route differs from the route initially assessed in Volume 2 of the EIS, particularly in the northern portion between the northern end of Baileys Road to the MLA area boundary. These differences have been assessed and included in this report.

The locality was not revisited by John van Pelt subsequent to the initial field assessment, but the relevant areas, along the Leichardt Highway, south of Wandoan to the northern end of Baileys Road were thoroughly assessed in earlier site visits. Photography for the photomontage was completed by PB staff.

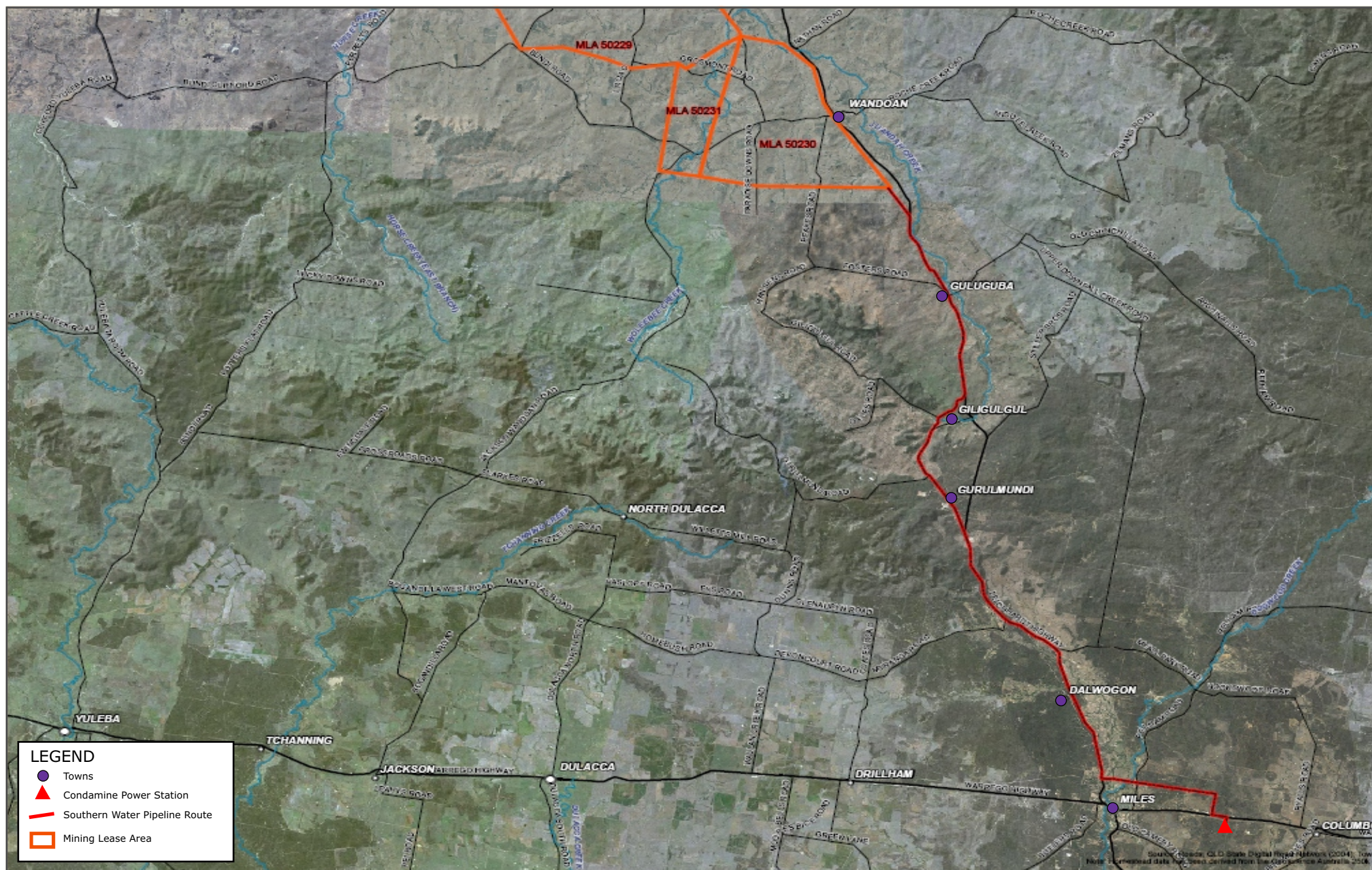


Figure 1-1
Southern CSM water supply pipeline alignment

2. METHODOLOGY OF ASSESSMENT

2.1 Relevant legislation and guidelines

Refer to the EIS technical report, as given in EIS Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

2.2 How the study was conducted and information obtained

Refer to the EIS technical report, as given in EIS Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

Further fieldwork was not deemed necessary for assessing the revised northern portion of the pipeline route as sufficient visual data was collected during previous site visits.

2.3 Limitations

Refer to the EIS technical report, as given in EIS Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

3. EXISTING ENVIRONMENT

3.1 General

The pipeline route alignment predominantly remains unaltered except for a portion in the north, between Giligulgul and the Wandoan Coal Project Mine Lease Area. Refer to the EIS, Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5 for a general description of the pipeline route.

3.2 Modified northern portion of the pipeline route

The pipeline route travels north along the road reserve of Baileys Road as originally proposed. The route continues north until the intersection of Baileys Road and Giligulgul Road. At this location the route is modified from the original proposed alignment. The modified route proceeds along Giligulgul Road until the road intersects with the Leichhardt Highway. The alignment continues to follow the Leichhardt Highway in a northerly direction until the south-east corner of private property Lot 3 FT695. The pipeline route crosses Lot 3 FT695 north of Six Mile Creek. This property supports predominantly agricultural land use activities. The proposed modified route alignment traverses the private allotment in a northerly direction to meet the Wandoan Coal Project MLA.

3.3 Visual Management Units

Due to the modified northern portion of the pipeline route, the Visual Management Units have altered. The Fosters Road – Peakes Road and Open fields VMUs are no longer relevant and has been replaced by the Giligulgul Road – Leichhardt Highway VMU, see figure 3-1. Summarised below is the primary characteristics of the Giligulgul Road – Leichhardt Highway VMU, however refer to the EIS, Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5 for VMU's which remain unaltered.

3.3.1 Giligulgul Road – Leichhardt Highway section VMU

At the intersection of Baileys Road and Giligulgul Road, the pipeline route proceeds in a north-east direction within the road reserve of Giligulgul Road. Where Giligulgul Road intersects with the Leichhardt Highway, the alignment turns into the road reserve of the Leichhardt Highway on the western side and progresses in a northerly direction until the south-east corner of Lot 3 FT695. At this point, the proposed alignment traverses this allotment in a northerly direction to enter the MLA areas at the south-east corner.

Topography in this VMU is gently undulating from approximate elevations of 300m to 320m. This section of the Leichhardt Highway differs from the southern sections of the highway in that it is predominantly, open grassland, cropping and live-stock grazing lands with scattered tree cover, see Figure 3-2.



Figure 3-2: *This VMU is dominated by grassland with scattered low tree cover.*

4. DESCRIPTION OF PROPOSED DEVELOPMENT

4.1 Route Alignment

Section 1.2 and Figure 1-1 of this report provide a description of the southern CSM water supply pipeline alignment, including the revised northern portion.

Visual Significance of Pipeline Route

The visual significance of the pipeline route is comparable to that described in the EIS, Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

4.2 Pipeline Construction

Refer to the EIS, Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

5. POTENTIAL IMPACTS

Visual Impacts resulting from the pipeline in any location are a product of both visual effects and visual sensitivity.

5.1 Visual Effects

The visual effects of the pipeline route are comparable to that described in the EIS, Volume 2, Chapter 19 Visual Amenity technical report TR 19-1-V2.5.

For the revised northern portion of the pipeline from north of Baileys Road to the MLA area boundary, the visual effects of the pipeline construction have been illustrated in Figures 5-1 – 5-4.

5.2 Visual Effect illustrated by Photomontage

The visual effect of the pipeline construction along the revised northern portion of the pipeline from north of Baileys Road to the MLA area boundary is illustrated with photomontage images, as shown in Figures 5.1 and 5.2, below. These figures supersede Figures 5-1, 5-2, 5-3 and 5-4 of the EIS technical report. For all other photomontages, reference should be made to the EIS technical report TR 19-1-V2.5.

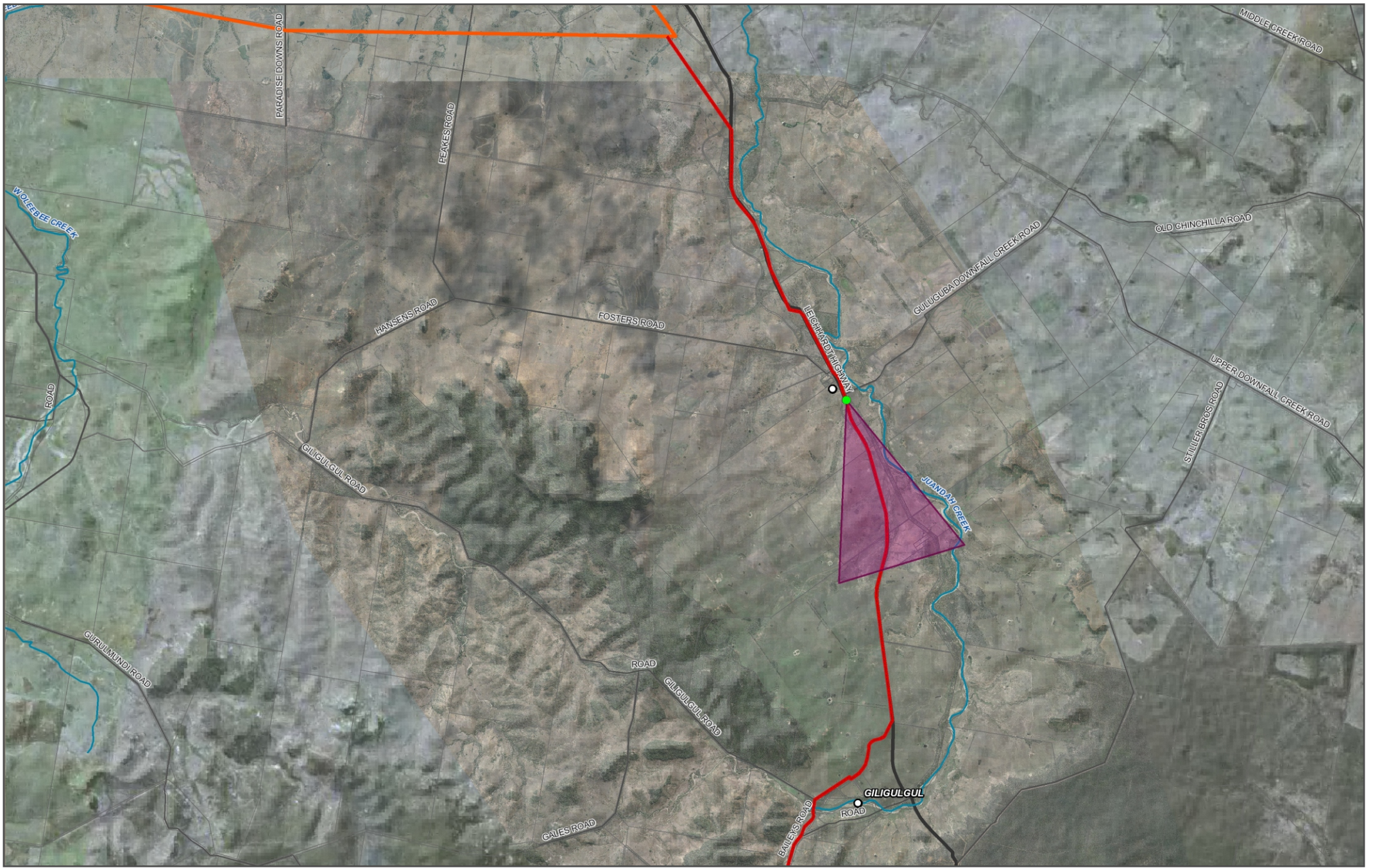


Figure 5-1
Photomontage Viewpoint Location
Additional Photomontage Viewpoint Location in revised northern portion.

5.2.1 Figure 5.2 Leichhardt Highway North

The photomontage illustrates the viewpoint from the eastern side of the Leichhardt Highway, immediately south of Guluguba, on the corner of Dorsets Road and the Leichhardt Highway. As shown in Figure 5-2a the viewpoint is generally looking south along the pipeline route, located within the western side of the road reserve of the highway.

The existing visual setting in this location of the highway is grassland with scattered tree cover, see Figure 5-2a. Construction of the pipeline will create a temporary change in the visual setting; see Figure 5-2b, due to the colour contrast of soil against existing grassland. The change is short lived in grass areas until grass cover is restored. In areas where tree cover is removed however, the visual effect will initially be higher. The visual effect will reduce relatively quickly as the new landscape borrows views from the existing background views and contrast levels are reduced.





Figure 5-2b
Photomontage from the viewpoint following construction and initial rehabilitation

5.3 Visual Sensitivity

The visual sensitivity of the pipeline route is comparable to that described in the EIS Volume 2, technical report TR 19-1-V2.5.

Figure 5-3 shows location of potential sensitive receptors close to the proposed pipeline route. This figure supersedes Figure 5-7 of the EIS technical report.

5.4 Visual Impacts

The visual impacts of the pipeline route are comparable to that described in the EIS Volume 2, technical report TR 19-1-V2.5.



6. MITIGATION MEASURES

The mitigation measures of the pipeline route are comparable to that described in the EIS Volume 2, technical report TR 19-1-V2.5, with no additional mitigation measures required due to the revised northern portion of the proposed pipeline.

7. RESIDUAL IMPACTS

The residual impacts of the pipeline route are comparable to that described in the EIS Volume 2, technical report TR 19-1-V2.5.

Where the pipeline is located within the highway reserve in the revised northern portion of the proposed pipeline, similar visual effects and impacts are experienced. Again the visual effects are of a temporary nature, quickly regaining existing landscape values soon after completion of construction. This minimises long term impacts to low.

8. CONCLUSIONS

The visual impacts of the pipeline route are comparable to that described in the EIS Volume 2, technical report TR 19-1-V2.5. All potential visual impacts of the revised northern portion of the proposed pipeline have been assessed and it has been concluded that impacts are not considered to be significant.