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COPPERSTRING PROJECT

REVIEW OF CORRIDOR ROUTE SELECTION

Submitted to:

Department of Employment, Economic Development and
Innovation

REPORT

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1.0 INTRODUCTION

The Copperstring Project consists of a high voltage transmission line extending between a point on the existing Ross (near Townsville) to Strathmore (near Collinsville) transmission line in the east and the Dajarra Road substation near Cloncurry in the west. In addition, several off-shoots south and west of Cloncurry are planned.

The project was declared a significant project under Section 26(1)(a) of the *State Development and Public Works Organisation Act 1971* on 18 June 2010. This declaration initiates a statutory environmental impact assessment procedure, as required under Part 4 of the Act. Following consultation with the Commonwealth Minister for Environment Protection, Water, Heritage and the Arts, and after the public circulation of a Draft Terms of Reference (ToR), a final ToR for an Environmental Impact Statement (EIS) was issued on 29 October 2010.

An EIS was prepared and released for public review between 13 December 2010 and 21 February 2011.

Subsequent to the public review period, a number of objections were raised with regards to the alignment of the project along a 100km section in the vicinity of Charters Towers, between the properties of PM Costello and RG & JM Landsberg (hereafter referred to as the Costello to Landsberg Alignment). In essence, the objections were pertaining to the perceived incompatibility between the proposed project and existing or envisaged future agricultural land uses, and also with regards to the due consultation process that was followed in designing the proposed alignment.

The Coordinator-General, in one of his roles as final adjudicator under the environmental impact assessment process followed, met with a number of the objecting landholders on 2 June 2011. As a result of that meeting, the Coordinator-General resolved to review the route selection process and the conclusions of that process with regards to the Costello to Landsberg Alignment.

Golder Associates was commissioned by the Coordinator-General to undertake such a review, as presented in this report. The objectives of this report are to:

- Review and comment on the appropriateness of the corridor route selection process and methodology undertaken by Resource and Land Management Services (RLMS), who prepared the route selection report and the EIS. This is to include a comparison with the process and methodology used by Powerlink Queensland in route selection for its transmission line projects in Queensland
- Review and comment on the appropriateness of the Corridor Selection Criteria adopted by RLMS
- Assess the impact of the current proposed alignment of the transmission line on land use practices as it relates to the proposed Costello to Landsberg Alignment.

The review was undertaken from Friday 10 June 2011 to Wednesday 15 June 2011. By necessity, this review has been brief, and largely based on materials supplied by the Office of the Coordinator-General and RLMS. These include:

- Coordinator-General (29 October 2010) Copperstring Project: Terms of reference for an environmental impact statement
- Copperstring (June 2010) Landholder Engagement and Acquisitions Plan
- Copperstring (November 2010) Stakeholder Communications and Engagement Plan
- Landholder submissions including:
 - i) Email from Tony McMahon to Keith Davies, dated 27 May 2011
 - ii) Letter from Blair & Lenore and Pip & Dale Knuth to Coordinator-General, dated 30 May 2011
 - iii) Email from Aberdale Images Photography (Philip & Dale Knuth) to Keith Davies, dated 31 May 2011



- Parsons Brinkerhoff (2010) Columboola to Wandowan South EIS. Report produced for Powerlink
- Phillips Fox (2007) Powerlink Guidelines for Corridor Selection, Preliminary Alignment and other processes for Route Acquisition Projects
- RDCA (2010) Assessment of the Impact to Aviation of the Proposed Copperstring Project in North Queensland. Report produced for the Copperstring EIS, attached as Appendix 26.
- RLMS (September 2010) Copperstring Project: Route Selection Report. Report prepared for CopperString Pty Ltd.
- RLMS (December 2010) Copperstring Project EIS
- RLMS (May 2011) Costello to Landsberg Alignment. Map of section of the proposed alignment prepared for CopperString Pty Ltd

The review is presented in the following sections. Section 2.0 first reviews the requirements of the ToR for the EIS, showing the need to address project alternatives and the need for consultation. Section 3.0 provides a review of the route selection report (RSR), attached as Appendix 4 to the EIS, that provides an outline of the approach used to delineate the preferred route. In doing so, the review compares the approach chosen with that used in a recent EIS produced for Powerlink. It also considers the validity or otherwise of statements in regards to potential impacts of the transmission line on existing land uses in the Costello to Landsberg Alignment section of the route. Section 4.0 provides a review of the consultation conducted during the route selection process, including an assessment of some of the issues raised and the Copperstring response to these issues. Section 5.0 concludes the review.

2.0 TERMS OF REFERENCE

The EIS is guided by the ToR. The ToR provides instructions in terms of process as well as EIS content. Under Part B Section 1.5 “Alternatives to the project”, it states:

“This Section should describe feasible alternatives including conceptual, technological and locality alternatives to the proposed project, as well as discussion of the consequences of not proceeding with the project. Alternatives should be discussed in sufficient detail to enable an understanding of the reasons for preferring certain options or courses of action and rejecting others....This information is required to assess why the scope of the project is as it is and to ensure that the environmentally sustainable design principles and sustainable development aspects have been considered and incorporated during the scoping of the project”.

Thus, route selection (or “locality alternatives”) is therefore clearly provided for in the ToR. The selection process has to be well documented to be able to outline the reasons for selecting the preferred route, taking into account sustainable design principles during the scoping of the project.

The ToR is also explicit with regards to the need for consultation in several locations: In Part A Section 7, the ToR requires the preparation of a consultation plan to identify broad issues of concern to local and regional community and interest groups and to address issues from project planning through commencement, project operations and decommissioning. Part B Section 1.7 specifies that the EIS should describe the methodology adopted to:

- “Identify stakeholders and how their involvement was facilitated
- Identify the processes conducted to date and the future consultations strategies and programs including those during the operational phase of the project



- Indicate how consultation involvement and outcomes were integrated into the EIS process and future site activities including opportunities for engagement and provision for feedback and action if necessary”

Lastly, in Part B Section 4.1.2, the ToR states: “Consistent with national and international good practice the proponent should engage at the earliest practical stage with likely affected parties to discuss and explain the project, and to identify and respond to issues and concerns regarding social impacts. This section of the SIA should detail the community engagement processes used to conduct open and transparent dialogue with stakeholders. This dialogue should include the project’s planning and design stages and future operations including affected local and state authorities. Engagement processes will involve consideration of social and cultural factors, customs, and relevant considerations of linkages between environmental, economic, and social impact issues”.

Thus, the ToR is clear about the need to engage with landholders, as key stakeholders, early in the design process (i.e. during route selection process), and that their concerns be addressed.

In conclusion to the above, the ToR establishes the need for a well documented route selection process as well as landholder consultation during this process, both of which are the grounds for landholder objections referred to in the Introduction of this report.

3.0 COPPERSTRING ROUTE SELECTION PROCESS

The Copperstring Project EIS provides a summary of the route selection process under Section 1.5.4 Locality alternatives – route selection. The summary is based on the route selection report (RSR) (RLMS September 2010), which is appended as Appendix 4 to the EIS.

According to Section 3.1 of the RSR, the selection process followed a seven stage approach, including the following:

- 1) Establish start and end points for the transmission line
- 2) Establish corridor selection criteria
- 3) Undertake desktop studies to determine broad constraints
- 4) Develop potential corridor route options
- 5) Select a preferred corridor option
- 6) Undertake field investigations based on desktop studies
- 7) Further refine the preferred corridor option

This is a valid approach, relatively typical when developing a preferred route, although stages 5 and 6 are often switched. Thus, field verification is often undertaken on a number of options before selecting a preferred route. The need for this will vary from project to project, as some will present with more definite preferred routes than others, based on desktop investigations. For the present project, desk top investigations identified several route options which were considered constructable and maintainable, yet field verifications were undertaken on only one of these. However, the RSR leaves open the potential for future route changes: “Establishing the route alignment is an iterative process. The route will be further refined as information from field surveys, discussions with landowners, design issues and regulatory comments are received”.

One of the key variables unknown at the time of the RSR was the start point of the transmission line along the existing Powerlink operated Ross to Strathmore line. Options investigated include starting points at Ross in the north, Strathmore in the south, and Woodstock about half way between Ross and Strathmore. It is understood that Powerlink have since determined this point be at Woodstock, coincidentally the start point of the preferred route alignment as determined by the route selection report. It considerably narrows down the number of options that can feasibly be pursued, rendering any routes originating from Ross or Strathmore redundant.



Table 4.1 of the RSR presents a list of corridor selection criteria used to identify and assess corridor options. It is reproduced in Table 1 below.

Table 1: Corridor Selection Criteria (from RLMS September 2010 route selection report)

Criteria
Minimise construction constraints such as:
■ Areas subject to inundation
■ Soil stability and erodability
■ Extent of rock
■ Number of watercourses
■ Crossings
■ Number of infrastructure crossings
■ Working in third party easements
Minimise disturbance to areas of known ecological value
Minimise disturbance to existing landholders and land use
Minimise the terrain constraint on the route
Minimise corridor length
Minimise bends in the transmission line
Maximise ease of access for construction and operations
Minimise disturbance to known heritage values
Minimise disturbance to and potential interference from existing third party infrastructure

These are reasonable criteria often used when selecting preferred development sites or routes, though others are also often used. For example, criteria listed in Powerlink's internal guidelines for route alignment include:

- Position the transmission line as far as reasonable from residences and places of assembly in which children will remain for extended periods of time, such as schools or childcare centres
- Limit the number of land titles affected by the proposed line
- Place the final alignment as close to land title boundaries as practicable
- Maintain a safe distance from local and private airstrips
- Position the transmission structures and wires so as to cause minimal interference to farming operations

These Powerlink criteria overlap to some extent with those used by the RSR, though there are differences. Recent EISs produced for Powerlink employ their own, expanded range of criteria, though those of Powerlink's internal guidelines are essentially incorporated. A recent EIS produced for Powerlink, the Columboola to Wandowan South EIS (Parsons Brinkerhoff 2010), employs a "base" list of criteria, which are then evaluated for their relevance in distinguishing between available options. Many of the criteria used by Parson Brinkerhoff (2010) also overlap with those used in the RSR. The same criteria do not always suit every route selection project. Some criteria will be redundant as routes may be similar in terms of these



criteria, or the relevant criterion subjects (for example, matters of National Environmental Significance) may simply not be present. Where relevant, performance indicators are provided to assess the options against. Each of the criteria and performance indicators is then discussed in terms of the route options evaluated, criterion-by-criterion.

This is a different situation from that encountered in the RSR. After presenting the list of (reasonable) criteria, most of the discussion in the RSR is in terms of “Regional Constraints” (Section 6), which uses headings very different from the criteria. This results in a degree of confusion about what is being considered important in the route selection. New topics are presented such as native title and land tenure, which do not feature in the criteria. Nevertheless, land tenure is considered extensively in the evaluation of the routes. For example, in the statistical summary Table 7.1 of the RSR, considerations of land tenure, native title, and mineral and petroleum tenements occupy half of the table, suggesting that these criteria were considered more strongly in route selection than the criteria listed in Table 4.1 of the RSR would lead to believe. A criterion-by-criterion approach in the discussion, and concomitant reference to clear performance indicators, would have clarified the approach taken.

In a way, the discussion on “Regional Constraints” would have been better presented before the list of criteria, as it would have allowed the list of criteria to be founded on regional constraints. At present, a topic such as geology and soils is presented at some length in Section 6 (including two A3 maps), yet “soil type and geology have not... been considered as a major constraint”. It suggests that soil stability and erodability is a redundant criterion in Table 4.1 of the RSR, and could have been left out.

Section 7 forms the heart of the RSR, and presents an evaluation of each of the potential route options. This section presents evidence that a variety of options around the Charters Towers region were considered. These include not only the major four route options (from Ross, Woodstock, and two from Strathmore), but also several options within the preferred option (Woodstock to Pentland), which is the option extending between the properties of PM Costello and RG & JM Landsberg. Section 7.2.1 indicates that the route selection took into account the “relatively small parcels which serve as Charters Towers’ semi-rural area”, and avoided these types of areas where possible to avoid “conflict and land owner concern”. It notes that the proposed alignment instead is located primarily on large rural lots, zoned Rural, where the subdivision size under the Dalrymple Shire Planning Scheme is 100 ha, and 12 km from the Environ Zone, where minimum subdivision of 8 ha is available. The RSR state that “the likelihood of future small scale subdivision in the area of the proposed route is therefore considered unlikely”. As all properties along the Costello to Landsberg Alignment section are zoned Rural (following a review of the Dalrymple Shire Planning Scheme zoning maps), this conclusion appears reasonable.

The route variations considered in the Costello to Landsberg Alignment section appear to have been primarily designed to avoid mines and future mine expansion. However, agricultural land uses are considered, but do not appear to warrant major diversions, as by and large, agricultural land uses would not be majorly affected. Two agricultural land uses are considered, including cattle grazing (which is the dominant land use in the study area) and cropping. With regards to cattle grazing, the RSR acknowledges that there may be limitations that would be imposed on aerial mustering. It notes that transmission lines need to be located some distance from stockyards and that transmission lines will need to be well demarcated so that they are visually obvious. The extent to which aerial mustering is used in the Costello to Landsberg Alignment section is not stated in the RSR. However, from records of land holder concerns, only two landholders raised the potential impacts of restricted aerial mustering on their grazing operations. No information was available during the review on whether aerial mustering is actually conducted on a routine basis along the Costello to Landsberg Alignment section.

With regards to cropping, Section 6.4.1 notes that there are “no significant Strategic Cropping Lands or irrigated areas in the study area apart from the areas located in the eastern extremity of the study area” (away from Charters Towers). It also notes that, at any rate, “Copperstring’s position (which is consistent with other industry participants) is that cropping, where vegetation is not of excessive height (i.e. up to 3.5 m height), can generally occur underneath high voltage electricity transmission lines. Therefore, impacts on cropping (where the crop is low growing) are expected to be minimal”. This conclusion appears to be reasonable on the facts presented in the RSR, and it would be unlikely that the proposed transmission line would negatively impact on future cropping of the land, apart from taking some land for the bases of towers.



The only exception would be if the crops proposed to be grown would consist of very tall vegetation, such as tall tree crops. A survey of the types of tree crops available for growth in the Charters Towers area is beyond the scope of this review.

Routes from Ross or Strathmore would have avoided the Costello to Landsberg Alignment section altogether. However, the discussion in Section 7 and the summary Table 7.1 indicate that:

- The Ross to Pentland section is constrained by the steep Hervey Range that would need to be crossed and the intensely developed land around the Ross substation
- The Strathmore (north) to Pentland section is constrained by the steep Leichhardt and Robey Ranges, lack of access, areas of ecological concern, and high winds
- The Strathmore (south) to Pentland section is constrained by flooding, the steep Leichhardt Range, and areas of ecological concern

The RSR summarises that of all the options east of Pentland, the Woodstock option is preferred, as it is:

- Considerably shorter than the other options
- Less constrained by existing development and infrastructure when compared to the Ross option
- Less physically and environmentally constrained compared to the Strathmore options, which traverse steep rugged land, affected by large areas of Endangered and Of Concern regional ecosystems
- Proximate to the Flinders Highway which makes it more accessible for construction and maintenance compared to the Strathmore route options.

It should be noted that according to Section 7, the Woodstock to Pentland section is not without constraints itself. For example, it also needs to cross the Leichhardt Range (in common with the Strathmore options). Though shortest, the Woodstock option is only 3% shorter than the Ross option, hardly a clear deciding factor on its own. Nevertheless, taking into account all factors described in the RSR, it is reasonable to conclude that the Woodstock option would be the preferred option in terms of avoiding major constraints and ease of access.

4.0 CONSULTATION

Minimising the disturbance to existing landholders and land use is part of the selection criteria included in the RSR. The rationale for this is as follows:

- A corridor able to avoid townships/urban areas and land uses that would be adversely impacted by the construction and operation of transmission lines will result in less disturbance during construction and may assist in obtaining landowner acceptance of the proposal.
- Locating towers away from dwellings and townships reduces the visual impacts of towers.
- Transmission lines are a potential hazard for aerial mustering and the location and design needs to have regard to aerial mustering practice.

Within the RSR, reference is made in a number of sections to locate the line in areas that minimise disturbance on landowners. For example, Section 6.4.3 Urban Areas states that “transmission lines should seek to avoid urban centres and surrounding semi-rural areas as they are likely to create conflict with residents... This will have greater visual impact, increase cost and conflict with land owners and third party infrastructure providers”.

Reference is made to the refinement of the route through the Leichhardt Range in section 7.2.1 Woodstock to Pentland/Torrens Creek Option following discussion with landowners, and to avoid “relatively small parcels which serve as Charters Towers’ semi-rural area... Given the potential for conflict and land owner concern...”.



There is detail provided within the RSR of discussions with landowners, but evidence of extensive consultation that has been undertaken and relationships established with all landowners along the Costello to Landsberg Alignment is as follows.

CopperString (November 2010) Stakeholder Communication and Engagement plan states as Strategic Objectives in Section 5, including but not restricted to:

- To provide quality engagement and genuine opportunities for feedback
- Design and construct the project with the stakeholder in mind, in particular land owners along the project corridor
- To be responsible to stakeholders and the local community
- To ensure issues are effectively managed within a timely manner and to the satisfaction of stakeholders
- Ensure potential stakeholder community issues are identified early and appropriate mitigation strategies are implemented to address these and the local community
- To ensure issues are effectively managed within a timely manner and to the satisfaction of stakeholders
- Ensure potential stakeholder community issues are identified early and appropriate mitigation strategies are implemented to address these.

The approach to achieve these objectives is to establish relationships with key stakeholders, including landholders/leaseholders. The importance of maintaining a consistent approach to building and maintaining stakeholder relationships was recognised by the CopperString Stakeholder Communications and Engagement team and the aim was to be heavily involved in all landholder engagement activities throughout the environmental assessment and approvals.

This approach is in line with Powerlink Guidelines for Corridor Selection, Preliminary Alignment and other processes for Route Acquisition Projects (Phillips Fox 2007), which advises that initial discussions with potentially affected landowners must take place during the Preliminary Alignment phase. Furthermore, they advise that in the initial planning stages it is not possible to consult with all stakeholders, nor is that required under the EIS process. To consult exclusively with a select group of agencies/stakeholders may be seen to lead to a biased analysis or evaluation where only those agencies are given an opportunity to participate in the evaluation process. Powerlink policy states that stakeholders ought not to be involved in the analysis or evaluation process itself, but consulting with stakeholders is perfectly valid if done for a purpose such as seeking or providing information.

The Stakeholder Communications and Engagement plan was undertaken in conjunction with the CopperString (June 2010) Landholder Engagement and Acquisitions Plan. This document provided the process for engagement with landholders to ask for access to their property for the purposes of preliminary investigations and to begin discussions regarding an easement for the construction, operation, maintenance and ultimate removal of the transmission line. The purpose for engagement was to develop favourable relationships with landholders prior to the negotiation process and to avoid a process of compulsory acquisition and transfer of land to the CopperString developers, if possible.

The process for engagement with landholders was as follows:

- Identification of impacted landholders
- Letter of introduction to identified landholders
- Coordination of individual landholder meetings
- Conducting of individual landholder meetings



- Accompanying specialist consultants during field work to ensure CopperString policies and procedures were adhered to
- Discussions with leaseholders and other tenure negotiations

Communications tools used to engage the community and allow feedback included:

- PowerPoint presentations
- Newsletters
- Posters/banners for use at road shows, community information days and other forums
- Fact sheets
- Project website
- Free call number
- Dedicated email address for enquiries
- Additional communications tools, such as letters to residents and SMS alerts were also used

The Communications and Engagement activities involving landowners that occurred include:

- Introductory letter to introduce the project to Landholders and Leaseholders – 7 June 2010
- Newsletter one – 21 June 2010
- Phone calls by land agents to all landholders to introduce the project and set up meetings – completed June
- Initial meetings with landowners – June/July 2010
- Dedicated 1800 free phone number – June 2010
- Briefings offered to landowners – August 2010
- Meetings with landowners regarding easement options – July 2010 to October 2011
- Letter to landowners regarding upcoming Community Roadshow and information on the EIS process – August 2010
- Community Roadshow One to provide an avenue for community participation and feedback on the TOR – August 2010
- Newsletter two – September 2010
- Letter three providing an update and progress and issues – September 2010
- Newsletter three – December 2010
- Letter four – December 2010
- Community Roadshow Two to provide information on the EIS findings – December 2010
- Newsletter four – March 2011
- Community Roadshow Three to provide information on the EIS findings – February 2011



■ Newsletter five – September 2011.

It was noted that six community relations staff would be employed in September 2011, to continue as part of the project team to maximise engagement with the community, keep landholders up to date with the Project and provide feedback directly to CopperString and the Contractors, aid in covering community activities and provide a community presence and sense of involvement. It is intended to retain the same Community Relations Officers across the key project stages. Where there is a transition between officers, a succession plan to incorporate a relevant handover period will be developed. The handover period will include the transition of the relationship between the landholders and the officers.

All information regarding landholder engagement activities and issues recorded by landowners were passed onto the CopperString Stakeholder and Community Relations Manager and recorded on a database and collated in an Issues Register. This document included approved responses and notes on any considered actions related to handling issues and to ensure issues were dealt with in a timely manner.

Following a review of a database summary of Stakeholder Consultation, records show initial contact with all landholders on the Costello to Landsberg Alignment occurred between 14 June 2010 and 24 August 2010. Records were available concerning landowner liaison up until 28 March 2011.

In addition to landholder consultation, including the engagement activities mentioned above, a number of landholders took part in case studies to identify issues and prepare processes to mitigate these issues. These results and mitigation measures were included in the Social Impact Assessment (SIA) (Section 14 of the EIS). A Social Impact Management Plan was also produced (Appendix 22 of the EIS).

From the SIA, social impacts and their significance were identified based on the Project information, including feedback from landholders. During SIA consultations, landholders identified that the actual presence of the Project was causing social impacts (such as stress, uncertainty and potential limitations on future property development). Research by Gerlach (2004, as quoted in the EIS) identified that one of the reasons given by opponents of transmission line projects is that the lines and towers can be seen by landholders as symbols of invasion and loss of control.

In the SIA, management strategies around potential social impacts and their significance to the Project were identified. Management strategies related to the concerns highlighted by the landholders in the Costello to Landsberg alignment include the following.

- Decrease of quality of living and working environment. This included the impacts to the living environment including noise, dust, vibration, artificial light and change in visual amenity and links to a decrease in emotional and physical health. It is intended to manage these issues on an ongoing basis by:
 - Developing and implementing a Construction Environmental Management Plan (including reporting)
 - Developing and implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
 - Adopting a Code of Conduct for the workforce
 - Induction and tool box meetings where workers will be reminded of the Code of Conduct and the consequences for not meeting it
 - Implementation of Occupational Health and Safety policies
 - Implementation of a dispute resolution process
 - Implementation of Leighton Contractors' Community Relations Charter and Code of Business Conduct
 - Meeting the conditions in the negotiated Landholder Compensation Package.



- The potential for landholders to experience a real or perceived decrease in health during construction as a result of the Project presence, the proximity of the Project to homesteads and working locations, physical construction impacts. There was potential for perceived or real impacts associated with emotions and a decrease in the quality of the living environment especially the change in visual amenity and a decrease in the ability to make decisions about further redevelopment of their property immediately under the transmission line and easement. It is intended to manage these issues on an ongoing basis by:
 - Working with landholders to identify the most appropriate route on their property within Project constraints
 - Developing and implementing a Construction Environmental Management plan
 - Developing and implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
 - Meeting the conditions in the Landholder Compensation Package
 - Meeting the conditions of the CHMP
 - Ongoing communications and consultation with impacted stakeholders.
- Transfer of weeds along the alignment and on to neighbouring properties and construction workers not leaving gates how they found them, leading to potential damage to internal road and track networks and pasture on the properties caused by Project vehicles accessing work sites and construction workers accidentally damaging landholder's infrastructure because there were not aware of it, such as roads, water, sewerage, power lines, fencing, stock yards and communication. It is intended to manage these issues on an ongoing basis by:
 - Developing and implementing a Construction Environmental Management Plan
 - Developing and Implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
 - Adopting a Code of Conduct for the workforce
 - Induction and tool box meetings where workers will be reminded of the Code of Conduct and the consequences for not meeting it
 - Implementation of a dispute resolution process
 - Reinstating all damage to property (caused by CopperString) to the same standard as before the construction activity took place
 - Implementation of Leighton Contractors' Community Relations Charter and Code of Business Conduct
 - Implementation of Occupational Health and Safety policies
 - Meeting the conditions in the negotiated Landholder Compensation Package.
- Managing the construction impacts could increase the workload for landholders eg. meetings with Project representatives, management of weeds, trialling new property management strategies, getting cattle used to the construction impacts and following up on poor construction management practices (eg. gates left open and potentially having to re-muster cattle). It is intended to manage these issues on an ongoing basis by:
 - Developing and implementing a Construction Environmental Management Plan



- Developing and Implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
- Adopting a Code of Conduct for the workforce
- Induction and tool box meetings where workers will be reminded of the Code of Conduct and the consequences for not meeting it
- Implementation of a dispute resolution process
- Implementation of Occupational Health and Safety policies and
- Meeting the conditions in the negotiated Landholder Compensation Package.
- Increased cost to manage the property due to the physical impacts of the Project construction. This includes increased costs associated with agistment of cattle or having to use other properties owned by the landholder which will require increased transport costs. It is intended to manage these issues on an ongoing basis by:
 - Developing and implementing a Construction Environmental Management Plan
 - Developing and Implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
 - Meeting the conditions in the negotiated Landholder Compensation Package.
- Cattle and other animals may be disturbed by the construction of the Project and may be negatively impacted by the noise and dust associated with the construction, construction vehicles and construction workforce. It is intended to manage these issues on an ongoing basis by:
 - Developing and implementing a Construction Environmental Management Plan
 - Developing and Implementing a Construction Stakeholder Communications and Engagement Plan (including reporting)
 - Meeting the conditions in the negotiated Landholder Compensation Package.
- Increased risk of aerial fatality. The nature of heli-mustering requires the helicopter pilots to fly at low altitudes. A number of landholders own and operate fixed wing aircraft, which they use to travel between properties. Hazards such as transmission lines can pose serious threats to health and safety. It is intended to manage these issues on an ongoing basis by:
 - Undertaking an assessment of the impact to aviation of the Project (Robert D Collins commissioned by CopperString (see Appendix 26 of the EIS)
 - Providing general advice to the aviation community in the relevant areas, and specific advice to AOC holders, Ergon Energy, the RAAF and owners of properties where airstrips are located
 - Relocating the transmission line away from stockyards where practicable
 - Installing line identification markers on transmission lines.
- Restrictions on future developments. Landholders will be restricted as to the infrastructure and activities they can undertake within the Project easement.
 - The potential for landholders to incur increased costs to operate their property and business will be managed through the negotiation and implementation of the Landholder Compensation Package.
- The presence of the Project on a property may decrease its value. It is intended to manage these issues on an ongoing basis by:



- Working with landholders to identify the most appropriate route on their property within Project constraints
- Meeting the conditions in the negotiated Landholder Compensation Package.

Following the review of the Landholder engagement activities that were undertaken, and the mitigation activities that will continue to be ongoing through the life of the project, it is clear that landholders were contacted, informed and provided extensive opportunities to obtain information about the project and the impacts it would have on their properties. Consultation was undertaken over a period of more than six months, allowing landowners to feedback their concerns to the land agent and members of the Consultation and Engagement team. In our opinion, the engagement process allowed enough time and opportunity to provide feedback and raise concerns.

As mentioned in the RSR, consultation and the final decisions regarding the alignment of the line will be ongoing up to the start of construction.

5.0 CONCLUSION

This review concludes that, overall, the route selection process and methodology used by RLMS during the preparation of the RSR was valid, using reasonable criteria for route selection, and providing adequate detail to provide a degree of confidence that issues of concern were considered in the selection of the preferred route. The RSR report itself could have been constructed in a more logical and consistent manner such as that of the route selection report for the recent Columboola to Wandowan South EIS (Parsons Brinkerhoff 2010), produced for Powerlink. However, the preferred route option chosen by the RSR appears to be reasonable on the basis of the information presented.

There are no details provided within the RSR of discussions with landowners, but evidence was viewed of extensive consultation that has been undertaken and relationships established with all landowners along the Costello to Landsberg Alignment for the landholders to obtain information regarding the alignment of the line on their land, and to provide feedback and raise their concerns on an ongoing basis. This consultation was conducted both during and subsequent to the production of the RSR.



Report Signature Page

GOLDER ASSOCIATES PTY LTD

A handwritten signature in blue ink, appearing to read 'Toivo Zoete'.

Toivo Zoete
Principal Environmental Adviser

TZ/ML

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