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CopperString 2.0

Supplement to the Draft Environmental Impact Statement

Volume 4

Document Control

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Issue	Date	Prepared By	Reviewed / Approved By
Rev A Draft 1	August 2021	Heidi Marshall	Philip Bradley
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Rev 1 Draft	December 2021	Jack Caleo	Philip Bradley
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1 Introduction

The CopperString 2.0 Project (the Project) involves the construction and operation of approximately 1,000 km of extra high voltage overhead electricity transmission line by the proponent (CuString Pty Ltd) that will connect the North West Power System (NWPS), and foundation customers at isolated mine sites along the Project route, to the state electricity grid.

1.1 Background

The Project was declared to be a 'controlled action' under the EPBC Act on 14 May 2019. As such, the Project will be assessed under the bilateral agreement between the Queensland and Commonwealth Governments.

The Draft Terms of Reference for the EIS were placed on public display from Monday 8 July 2019 to Friday 2 August 2019 and the Final Terms of Reference for EIS were published in September 2019.

The Draft EIS was finalised in November 2021 and placed on public display from 21 December 2020 until 12 February 2021 with stakeholders and the public invited to make submissions in response to the draft EIS. 27 written submissions were received during the public notification period.

In response to the written submissions received and following further consultation with Commonwealth and State Agencies, additional information for the EIS was requested by the Coordinator-General on 17 June 2021.

1.2 Purpose of the Supplementary Information

Volume 4 Supplementary Information to the CopperString Environmental Impact Statement (SEIS) has been prepared in response to the following:

- submissions that were received from stakeholders and members of the public in relation to the draft EIS or Draft Revised EIS
- further consultation with impacted land and tenure holders
- changes to the concept design, construction methodologies, quantities and logistics which have been made since the draft EIS was completed
- the additional information or clarification requests from the Coordinator General.

This supplement should be read in conjunction with Volumes 1-3 of the draft EIS. To the extent of any inconsistencies, the information in this supplement (Volume 4 including Attachments A-I) supersedes any information in any other volume of the draft EIS. The combined Volumes 1-4 form the revised draft EIS for the Project.

This supplement was prepared by Base Consulting Group on behalf of CuString (the proponent). Input to this supplement was provided by the proponent as well as EIS technical specialists Base Consulting Group, GHD, ACIL and some specialist subconsultants. Supplementary design and construction methodologies have been provided by the ECI (Early Contractor Involvement) Joint Venture lead by UGL and CPB who are assisting CuString deliver the project.

The supplement is structured as follows:

- Section 2 - describes the stakeholder consultation that was undertaken after submission of the draft EIS including consultation during public display of the draft EIS and during the preparation of the Volume 4 Supplement.
- Section 3 – provides a list of the of the stakeholder groups that made submissions on the draft EIS including government advisory agencies, landholders, and mineral tenure holders as well as other commercial business groups and public organisations. A table including the submitter

number (assigned by the Office of the Coordinator General), key themes raised and cross reference to where further detailed responses are provided throughout Volume 4 has also been included within this section.

- Section 4 – provides responses to additional information that has been requested by the Coordinator-General as a result of submissions received on the draft EIS. This section also outlines all changes to the project description that have occurred since the completion of the draft EIS.
- Section 5 – provides a table of editorial corrections made buy submitters which are accepted as relevant and supersedes any information in any other volume of the draft EIS.

Detailed technical information supporting the Volume 4 supplement is provided in the following attachments:

Table 1-1 Notifications of draft EIS publication

Attachment	Title	Format
A	Response to Submissions	Report
B	Revised Project Description	Report
C	Concept Tower Siting Plan	Plans
D	Revised Concept Infrastructure Plans	Plans
E	Revised Information MNES	Report
F	Additional Information Flora and Fauna	Report
G	Draft Biodiversity Offset Management Strategy	Report
H	Additional Information Economics	Tech Memo
I	Additional Management Plans and Updates Commitments Register	Reports
J	Flood Risk Assessment	Report

1.3 Defined terms

The following key terms are used throughout this supplement:

'The Project' – means the CopperString 2.0 EIS Project

'CuString' – means CuString Pty Ltd, the proponent

'Corridor selection' – means the baseline investigation corridor of the transmission line (a nominal 1,060 km long corridor). The corridor selection is 120 m wide from Woodstock to Dajarra Road, and 60 m wide from Dajarra Road to Mount Isa, Dajarra Road to Selwyn and Phosphate Hill, and Selwyn to Cannington. The 4 km long section of the corridor selection from Dajarra Road Substation to Chumvale Substation is 60 m wide and a 3 km long section from Dajarra Road Substation to the Dugald River 220 kV overhead line is 80 m wide.

'Study area' – the 5 km corridor which was subject to the field and desktop assessments (up to 2.5 km either side of the corridor selection). An increased study area width was employed to allow for a greater assessment of the surrounding areas and to allow for identification of regional values, connected values, and potential constraints or realignment opportunities

'Project area' – means the total width of the 120 m, 80 m or 60 m wide easement and other associated infrastructure or construction components required off the corridor selection easement including laydown areas, substations, CEV huts, permanent access tracks and construction camps.

'Project activities' – means the construction footprint of infrastructure to be constructed within and outside the easement including all temporary and permanent areas associated with access tracks, brake and winch sites, tower assembly and pads, transmission line of sight and conductor blow out clearing, CEV huts, construction camps, laydown areas, substations as further described in table 2-11 Volume 4, Attachment B Project Description.

2 Consultation

This section describes the stakeholder consultation that has been undertaken since the submission of the draft EIS on 21 December 2020. It includes the activities that were undertaken supporting the notification and public display of the draft EIS, consultation conducted during the public display period of the draft EIS, and consultation conducted during the preparation of the supplement to the EIS.

2.1 Public Exhibition of the Draft EIS

The draft EIS was on display between 21 December 2020 and 12 February 2021. The following public notification activities were undertaken to invite stakeholders to provide submissions on the draft EIS (Refer Table 2-1).

Table 2-1 Notifications of draft EIS publication

Date	Format	Notifications and Display Locations
21 December	Newspaper Advertisement	The Australian The Courier Mail The Townsville Bulletin
21 December	Electronic Copies of EIS Available. Display areas were set-up in library	Mount Isa City Library Burdekin Library Bob McDonald Library, Cloncurry Richmond Library Julia Creek Library Charters Towers Excelsior Library Townsville City Libraries Aitkenvale Flinders Library, Hughenden State Library of Queensland National Library of Australia
21 December	Personalised letters to impacted stakeholders	Landowners Overlaying Tenure Holders Traditional Owner Groups
21 December	Letters to Other Stakeholders	MITEZ Port of Townsville Queensland Rail Regional Development Australia Solar Citizens Queensland Resources Council Townsville Chamber of Commerce North Queensland Regional Reference Group
21 December	Social Media	Coordinator-Generals Coordinated Projects CopperString website (www.statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/current-projects/copperstring-project) CopperString 2.0 website(www.copperstring2.com.au) Linked in (CopperString 2.0) Twitter (@copperstring2) Facebook (CopperString 2.0)

2.2 Draft EIS Consultation

Consultation with stakeholders has been ongoing since the inception of the Project and therefore stakeholders have been updated at regular intervals on the progress of the EIS as well as the cooperation and involvement of key project partners, investors, financiers, and participants in the technical delivery of the Project. For Stakeholders that were directly impacted by the Project,

targeted consultation activities were undertaken (refer Table 2-2) to ensure they were aware of the EIS process and how to make a submission.

Table 2-2 Consultation activities during EIS display

Stakeholder Group	Consultation Activity
Richmond Shire Council Charters Towers Regional Council Cloncurry Shire Regional Council Flinders Shire Council McKinlay Shire Council Mt Isa City Council	Presentation to each Regional Council outlining the overall impacts of the project and impacts specific to each local government area.
Impacted Landholders	Phone calls – landholders were contacted by the Project to offer an opportunity to answer any questions they may have in relation to the EIS. Each impacted landholder also has a dedicated land agent that they can contact at any time.
Birriah People Jangga People Yirendali People Wanamara People Mitakoodi People Kalkadoon People Yalluna People	Regular meetings continued and correspondence had continued as part of the process of developing CHMPs and any questions relating to the EIS were covered as part of this process.

2.3 Consultation During Preparation of Supplement

The consultation activities undertaken during the preparation of Volume 4 EIS Supplement have been included in Table 2-3. These engagement activities included project information sessions, status updates, responses to submissions or other ongoing communications related to the planning and procurement of project elements. Some outcomes from these consultation activities have been relied upon in the preparation of the preparation of the Volume 4 EIS Supplement.

Below is an outline of the consultation meetings with DAWE and the agendas.

Meeting 1:

Date: 30 March 2021

Key topics: Field work

1. Approach to targeted survey effort (planning and desktop, property access) during Draft EIS 2019 / 2020
2. Overview of species survey effort and related habitat mapping outputs which appeared in the Draft EIS
3. Suitability and confidence of outcomes that informed Draft EIS impact assessment and shortcomings
4. Approach to further targeted or observational surveys and for which species and why.

Meeting 2:

Date: 4 May 2021

Key topics: Construction activities and impacts

1. Project activities - detailed description of disturbances expected within the project footprint from ECI JV which has improved in confidence and certainty since the Draft EIS.
2. Landscape types and disturbance areas within each and how the same project activity has very different impacts in different landscapes
3. Impact avoidance and what is possible or expected near environmentally sensitive areas.

4. Impacts to species within mapped habitats

Meeting 3:

Date: 7 June 2021

Key topic: Species specific impacts (non-residual, residual and significant)

1. Impact assessment methodology (flow diagram – avoidable, unavoidable non-residual, unavoidable residual, significant)
2. Impact assessment tables for individual species (draft provided for the painted honeyeater) which included an assessment of each individual project activity (non-residual or residual)
3. Landscape Photo array along line 3 (Cloncurry to Mt Isa) which provided context (aerial view and ground level perspective) supporting the assessment of impacts
4. Construction access clearing assessment (very light, Light, Medium, Heavy) for each transmission Line (between each tower)

Table 2-3 Consultation undertaken during preparation of the Volume 4 EIS Supplement

Stakeholder	Dates
Port of Townsville	12 January 2021
Queensland Rail	12 January 2021
NAIF (Northern Australia Infrastructure Fund)	29 January 2021
Department of Housing and Public Works	1 February 2021
Powerlink	9 February 2021
AEMO (Australian Energy Market Operator)	10 February 2021
Queensland Treasury Corporation	10 February 2021
Office of the Coordinator General	Fortnightly from 9 March 2021
Department of Natural Resources, Mines and Energy Queensland Treasury Department of State Development, Manufacturing, Infrastructure and Planning Department of the Premier and Cabinet	Fortnightly from Weekly from 18 February 2021
Department of Agriculture Water and the Environment	30 March 2021 4 May 2021 7 June 2021
Charters Towers Shire Council	5 March 2021 8 March 2021 25 May 2021 28 May 2021 9 June 2021 14 June 2021
Ergon Energy	22 March 2023 10 May 2021
Department of Agriculture and Fisheries	23 March 2021 24 March 2021 6 April 2021 7 April 2021 12 April 2021 15 June 2021 24 June 2021
Mt Isa City Council	24 April 2021 13 May 2021 25 May 2021 9 June 2021 14 June 2021

Stakeholder	Dates
Richmond Shire Council	24 April 2021 9 June 2021 14 June 2021
Department of Natural Resources, Mines and Energy	10 May 2021 21 May 2021 14 June 2021
Queensland Resources Council	12 May 2021
APA	13 May 2021
MITEZ	14 May 2021
Flinders Shire Council	25 May 2021 28 May 2021 9 June 2021 14 June 2021
McKinlay Shire Council	25 May 2021 27 May 2021 9 June 2021 14 June 2021
Cloncurry Shire Council	14 May 2021 25 May 2021 9 June 2021 14 June 2021
Department of Resources	26 May 2021 2 June 2021
Department of Regional Development, Manufacturing and Water	27 May 2021 and ongoing
Burdekin Shire Council	9 June 2021 14 June 2021
Townsville Enterprise Ltd	9 June 2021

3 Overview of Submissions

This section provides information regarding the 27 written submissions received since the draft EIS was put on public display on 21 December 2020. All submissions have been considered by the proponent. Stakeholders who lodged a submission are outlined in Table 3-1.

Table 3-1 Overview of submissions received on Draft EIS

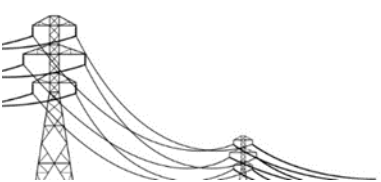
Stakeholder Group	Submitter Name
Federal Government	Department of Agriculture, Water and the Environment
State Government and State Agencies	Department of Employment, Small Business and Training Department of State Development Infrastructure, Local Government Planning Department of State Development Infrastructure, Local Government Planning Department of Resources Department of Education Department of Environment and Science Department of Regional Development, Manufacturing and Water Department of Agriculture and Fisheries Department of Transport and Main Roads Queensland Police Service Queensland Ambulance Service Queensland Health
Local Government	Richmond Shire Council Flinders Shire Council Charters Towers Regional Council Townsville City Council
Landholders	Landowners (3 submissions)
Tenure Holders	Round Oak Minerals Newmont Australia Vale Exploration Climate Council of Australia Pty Ltd
Business Groups / Businesses	Regional Development Australia Townsville and North West Queensland APA Group
Other Stakeholders	Private citizens (2 submissions)

Individual responses to the submissions received on the Draft EIS can be found in Volume 4 Attachment A Response to Submissions.

Table 3-2 provides a list of the submitters, themes raised, submitter reference number (assigned by the Office of the Coordinator General) and a cross-reference to where additional information in Volume 4 EIS Supplement can be found.

Table 3-2 Responses to submissions received on Draft EIS

Submitter and Themes	Submitter Number	Supplement Cross Reference
Richmond Shire Council Economic Benefit	1.0	n/a
Flinders Shire Council Economic Benefit	2.0	n/a
Regional Development Australia Town Economic Benefit	3.0	n/a
Department of Employment, Small Business and Training Economic Benefit	4.0	n/a
Charters Towers Regional Council Project description Environmental Management Waste Management Management Plans	5.01	n/a
	5.02	Volume 4 Attachment B Revised Project Description
	5.03	Volume 4 Attachment I Additional Management Plans
	5.04	Volume 4 Attachment I Additional Management Plans Volume 4 EIS Supplement Section 4.12 Additional Information Employment
	5.05	Volume 4 Attachment I Additional Management Plans Volume 4 Attachment D Revised Concept Infrastructure Plans
	5.06	n/a
	5.07	Volume 4 Attachment I Additional Management Plans
Department of Education Economic Benefit	6.01	n/a
	6.02	n/a
	6.03	n/a
Private Submitter Environmental Management	7.01	n/a
Private Submitter Project Description	8.0	n/a
Department of State Development, Infrastructure Local Government and Planning (EDQ) Legislation and approvals Cultural heritage	9a.01	n/a
	9a.02	n/a
	9b.01	Volume 4 EIS Supplement Section 4.16 Additional Information Legislation and Approvals
	9b.02	n/a
Private Submitter – Landholder Project description Landholder impacts	10.01	n/a
	10.02	n/a
	10.03	n/a
	10.04	n/a
Department of Resources Land Project description Legislation and approvals Vegetation management	11.01	Volume 4 Attachment B Revised Project Description
	11.02	Volume 4 EIS Supplement Section 4.2 Additional Information Land
	11.03	Volume 4 Section 5.0 Editorial Corrections
	11.04	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	11.05	n/a
	11.06	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	11.07	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	11.08	n/a
	11.09	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	11.10	Volume 4 EIS Supplement Section 4.5 Additional Information MSES



Submitter and Themes	Submitter Number	Supplement Cross Reference
	11.11	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	11.12	Volume 4 Attachment D Revised Concept Infrastructure Plans Volume 4 Attachment C Concept Tower Siting Plans
Planning and Performance Queensland Police Service Transport Social Project description Cumulative impacts Water resources and water quality	12.01	Volume 4 Attachment I Additional Management Plans
	12.02	Volume 4 Attachment I Additional Management Plans
	12.03	n/a
	12.04	n/a
	12.05	n/a
	12.06	Volume 4 Attachment I Additional Management Plans
	12.07	n/a
	12.08	n/a
	12.09	n/a
	12.10	Volume 4 Attachment I Additional Management Plans
	12.11	n/a
	12.12	Volume 4 Attachment I Additional Management Plans
	12.13	n/a
	12.14	n/a
	12.15	n/a
	12.16	n/a
Private Submitter – Landholder Project description Landholder Impacts	13.01	n/a
	13.02	n/a
	13.03	n/a
	13.04	n/a
Department of Environment and Science Project description Water resources and water quality Waste management Geology and soils Cultural heritage	14.01	n/a
	14.02	n/a
	14.03	n/a
	14.04	Volume 4 Attachment B Revised Project Description Volume 4 EIS Supplement Section 4.4 Additional Information MNES Volume 4 Attachment D Revised Concept Infrastructure Plans
	14.05	Volume 4 Attachment B Revised Project Description Volume 4 EIS Supplement Section 4.3 Additional Information MNES Volume 4 EIS Supplement Section 4.1.4 Corridor Access
	14.06	n/a
	14.07	n/a
	14.08	n/a
	14.09	Volume 4 Attachment I Additional Management Plans
	14.10	n/a
	14.11	Volume 4 EIS Supplement Section 4.2 Additional Legislation and Approvals
Department of Regional Development, Manufacturing and Water Water resources and water quality Project description Legislation and approvals	15.01	Volume 4, Attachment B Revised Project Description
	15.02	Volume 4 Attachment B Revised Project Description
	15.03	Volume 4 Attachment B Revised Project Description
	15.04	n/a
	15.05	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	15.06	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	15.07	Volume 4 Attachment B Revised Project Description
	15.08	Volume 4 EIS Supplement Section 5.0 Editorial Corrections

Submitter and Themes	Submitter Number	Supplement Cross Reference
	15.09	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	15.10	Volume 4 EIS Supplement Section 5.0 Editorial Corrections
	15.11	Volume 4 Section 5.0 Editorial Corrections
	15.12	Volume 4 Section 5.0 Editorial Corrections
Queensland Ambulance Service Hazard, health and safety	16.01	n/a
	16.02	n/a
	16.03	n/a
	16.04	Attachment I Additional Management Plans
Department of Agriculture and Fisheries Project description Water resources and water quality Project description Land Legislation and approvals Cultural Heritage	17.01	Volume 4 Section 5.0 Editorial Corrections
	17.02	Volume 4 Section 5.0 Editorial Corrections
	17.03	Volume 4 Section 5.0 Editorial Corrections
	17.04	Volume 4 Section 5.0 Editorial Corrections
	17.05	Volume 4 Section 5.0 Editorial Corrections
	17.06	Volume 4 Section 5.0 Editorial Corrections
	17.07	Volume 4 Section 5.0 Editorial Corrections
	17.08	n/a
	17.09	n/a
	17.10	Volume 4 Section 5.0 Editorial Corrections
	17.11	Volume 4 Section 5.0 Editorial Corrections
	17.12	Volume 4 Section 5.0 Editorial Corrections
	17.13	Volume 4 Section 5.0 Editorial Corrections
	17.14	Volume 4 Section 5.0 Editorial Corrections
	17.15	Volume 4 Section 5.0 Editorial Corrections
	17.16	Volume 4 Section 5.0 Editorial Corrections
	17.17	Volume 4 Section 5.0 Editorial Corrections
	17.18	Volume 4 Attachment I Additional Management Plans
	17.19	Volume 4 Attachment I Additional Management Plans
	17.20	n/a
	17.21	Volume 4 Attachment B Revised Project Description
	17.22	Volume 4 Section 5.0 Editorial Corrections
	17.23	Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
	17.24	Volume 4 Section 5.0 Editorial Corrections
	17.25	Volume 4 Section 5.0 Editorial Corrections
	17.26	Volume 4 Section 5.0 Editorial Corrections
	17.27	Volume 4 Section 5.0 Editorial Corrections
	17.28	n/a
	17.29	n/a
Round Oak Minerals Project description	18.01	Volume 4 EIS Supplement Section 4.1 Changes to the Project Description
	18.03	n/a
	18.04	Volume 4 EIS Supplement Section 4.1 Changes to the Project Description
Townsville City Council Project description	19.05	n/a
	19.06	n/a
Newmont Australia Project description Geology and soils Water resources and water quality Legislative and approvals Environmental Management Landholder impacts	20.01	n/a
	20.02	Volume 4 Attachment I Additional Management Plans
	20.03	Volume 4 Attachment I Additional Management Plans
	20.04	n/a
	20.05	Volume 4 Attachment I Additional Management Plans
	20.06	n/a
	20.07	n/a
	20.08	Volume 4 Attachment I Additional Management Plans

Submitter and Themes	Submitter Number	Supplement Cross Reference
	20.09	n/a
	20.10	Volume 4 Attachment I Additional Management Plans
	20.11	n/a
	20.12	n/a
	20.13	n/a
APA Power Holdings Economic Project Description Legislation and approvals	21.01	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.02	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.03	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.04	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.05	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.06	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.07	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.08	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.09	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.10	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.11	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.12	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.13	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.14	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.15	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.16	n/a
	21.17	n/a
	21.18	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.19	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.20	Volume 4 Attachment I Additional Management Plan
Vale Exploration Land Project description Site Description	22.01	n/a
	22.02	n/a
	22.02	n/a
	22.03	n/a
	22.05	n/a
	22.06	n/a
Private Submitter Land Geology and soils Environmental Management Biosecurity Water resources and water quality	23.01	n/a
	23.02	n/a
	23.03	Volume 4 Attachment I Additional Management Plans
	23.04	n/a
	23.05	n/a
	23.06	n/a
	23.07	n/a

Submitter and Themes	Submitter Number	Supplement Cross Reference
Air and greenhouse gas Waste management Hazard, health and safety Social Landholder impacts	23.08	n/a
	23.09	n/a
	23.10	n/a
	23.11	Volume 4 Attachment I Additional Management Plans
	23.12	Volume 4 Attachment I Additional Management Plans
	23.13	n/a
	23.14	n/a
Queensland Health Economic effect	24.0	n/a
Commonwealth Department of Agriculture, Water and Environment Environmental Management Matters of National Environmental Significance Project description Offsets	25.01	Volume 4 Supplementary EIS Section 4.3 Additional Information MNES
	25.02	Volume 4 Supplementary EIS Section 4.3 Additional Information MNES
	25.03	Volume 4 Supplementary EIS Section 4.3 Additional Information MNES
	25.04	Volume 4 Supplementary EIS Section 4.3 Additional Information MNES
	25.05	Volume 4 Supplementary EIS Section 4.3 Additional Information MNES
	25.06	Volume 4 EIS Supplement Section 4.3 Additional Information on MNES
	25.07	Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
Climate Council of Australia Economic benefit	26.0	n/a
Department of Transport and Main Roads Transport Project description	27.02	n/a
	27.03	Volume 4 EIS Supplement Section 4.5 Additional Information Transport
	27.04	n/a
	27.06	n/a

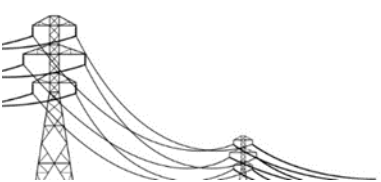
Note: n/a signifies submission responses which did not require additional information to be included within the EIS or EIS Supplement.

On the 13 October 2021, a draft version of the EIS Supplement Vol 4 additional information, was provided to all stakeholders who made a submission on the Draft EIS. Nine stakeholders made further submissions which have also been considered by the proponent. Table 3-3 provides a list of the submitters, themes raised, submitter reference number (assigned by the Office of the Coordinator General) and a cross-reference to where additional information in Volume 4 EIS Supplement can be found. Individual responses to the additional submissions received on the Draft EIS Supplement Vol 4 additional information, have been incorporated with those made on the Draft EIS and can be found in Volume 4 Attachment A Response to Submissions.

Table 3-3 Responses to submissions received on Draft EIS Supplement

Submitter and Themes	Submitter Number	Supplement Cross Reference
Charters Towers Regional Council Project Description General Comment Waste Management	5.09	Volume 4 Attachment I Commitments Register
	5.10	n/a
	5.11	Volume 4 Attachment I Commitments Register
	5.12	Volume 4 Attachment I Commitments Register
	5.13	Volume 4 Attachment I Commitments Register
Department of Resources MNES Salinity Ecosystems Essential Habitat Offsets	11.13	Volume 4 EIS Section 4.4 Additional Information MSES Volume 4 Attachment E Revised Information MNES Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
	11.14	Volume 4 Attachment I Commitments Register
	11.15	n/a

Submitter and Themes	Submitter Number	Supplement Cross Reference
Land	11.16	Volume 4 EIS Section 4.4 Additional Information MSES Volume 4 Attachment I Commitments Register
	11.17	Volume 4 EIS Section 4.4 Additional Information MSES Volume 4 Attachment E Revised Information MNES Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
	11.18	n/a
Department of Environment and Science General Comment MSES Corridor Selection Environmental Management Disturbance Footprint Residual Impact Terminology/Typo Rehabilitation Water Quality Project Approvals	14.12	Volume 4 EIS Supplementary section 4.1.1
	14.13	n/a
	14.14	Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
	14.15	n/a
	14.16	n/a
	14.17	n/a
	14.18	n/a
	14.19	n/a
	14.20	Volume 4 EIS Supplementary Volume 4 Attachment E Revised Information MNES Volume 4 Attachment G Draft Biodiversity Offset Management Strategy
	14.21	n/a
	14.22	Volume 4 Attachment I Commitments Register
	14.23	Volume 4 Attachment I Commitments Register
Department of Regional Development, Manufacturing and Water Water Resources Impacts Terminology/Typo	15.12	Volume 4 Attachment I Additional Management Plans and Commitments Register
	15.13	Volume 4 Attachment B Revised Project Description Volume 4 Attachment E Revised Information MNES
Department of Agriculture and Fisheries Resources Waterway Barrier Works Waterways/Fish Passage Biosecurity Agriculture Terminology/Typo	17.30	Volume 4 Attachment I Additional Management Plans and Commitments Register
	17.31	n/a
	17.32	Volume 4 Attachment I Commitments Register
	17.33	Volume 4 Attachment I Commitments Register
	17.34	n/a
	17.35	n/a
	17.36	n/a
APA Power Holdings Economic Alternatives Greenhouse Gas RIT-T Process Electricity Prices Project Feasibility Electrical Flow Electrical Network Demand Analysis Sensitivity Analysis	21.21	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.22	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.23	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.24	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.25	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.26	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.27	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.28a	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.28b	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics



Submitter and Themes	Submitter Number	Supplement Cross Reference
	21.28c	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.28d	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.29	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.30	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.31a	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.31b	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.32	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.33	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.34	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.35	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.36a	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.36b	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
	21.37	Volume 4 EIS Supplement Section 4.8 and Attachment H Additional Information Economics
Vale Exploration Alternative Route Resources Corridor Selection	22.07	n/a
	22.08	Volume 4 Attachment I Commitments Register
	22.09	Volume 4 Attachment I Commitments Register
	22.10	n/a
	22.11	Volume 4 Attachment I Commitments Register
	22.12	Volume 4 Attachment I Commitments Register
Commonwealth Department of Agriculture, Water and Environment Habitat MNES Offsets EMP	25.08	Volume 4 Attachment E Revised Information MNES Volume 4 Attachment F Additional Information Flora and Fauna
	25.09	Volume 4 Attachment E Revised Information MNES
	25.10	n/a
	25.11	n/a
	25.12	n/a
	25.13	n/a
Department of Transport and Main Roads Transport Impacts Flooding Rail Impacts Noise and Vibrations Project Configuration	27.11	n/a
	27.12	Volume 4 Attachment I Additional Management Plans and Commitments Register
	27.13	Volume 4 Attachment I Additional Management Plans and Commitments Register
	27.14	Volume 4 Attachment I Additional Management Plans and Commitments Register
	27.15	n/a
	27.16	n/a
	27.17	n/a
	27.18	n/a
	27.19	n/a
	27.20	n/a

Note: n/a signifies submission responses which did not require additional information to be included within the EIS or EIS Supplement

4 Additional Information (Draft EIS)

This section has been prepared in response to the request for additional information for the revised environmental impact assessment. Text boxes have been used throughout this section to relate the items requested with the corresponding proponent response.

Corridor Alignment

- Identify any changes to or realignment of the project corridor since the draft EIS.

4.1 Changes to the Project Description

Since the completion of the draft EIS, there have been several modifications to the project description which have been included and assessed as part of the SEIS. Most notable changes include four realignments of the transmission line corridor selection, repositioning of the Woodstock and Selwyn substations and removal of the Cannington and Kennedy (option) connections as shown in Figure 4-1.

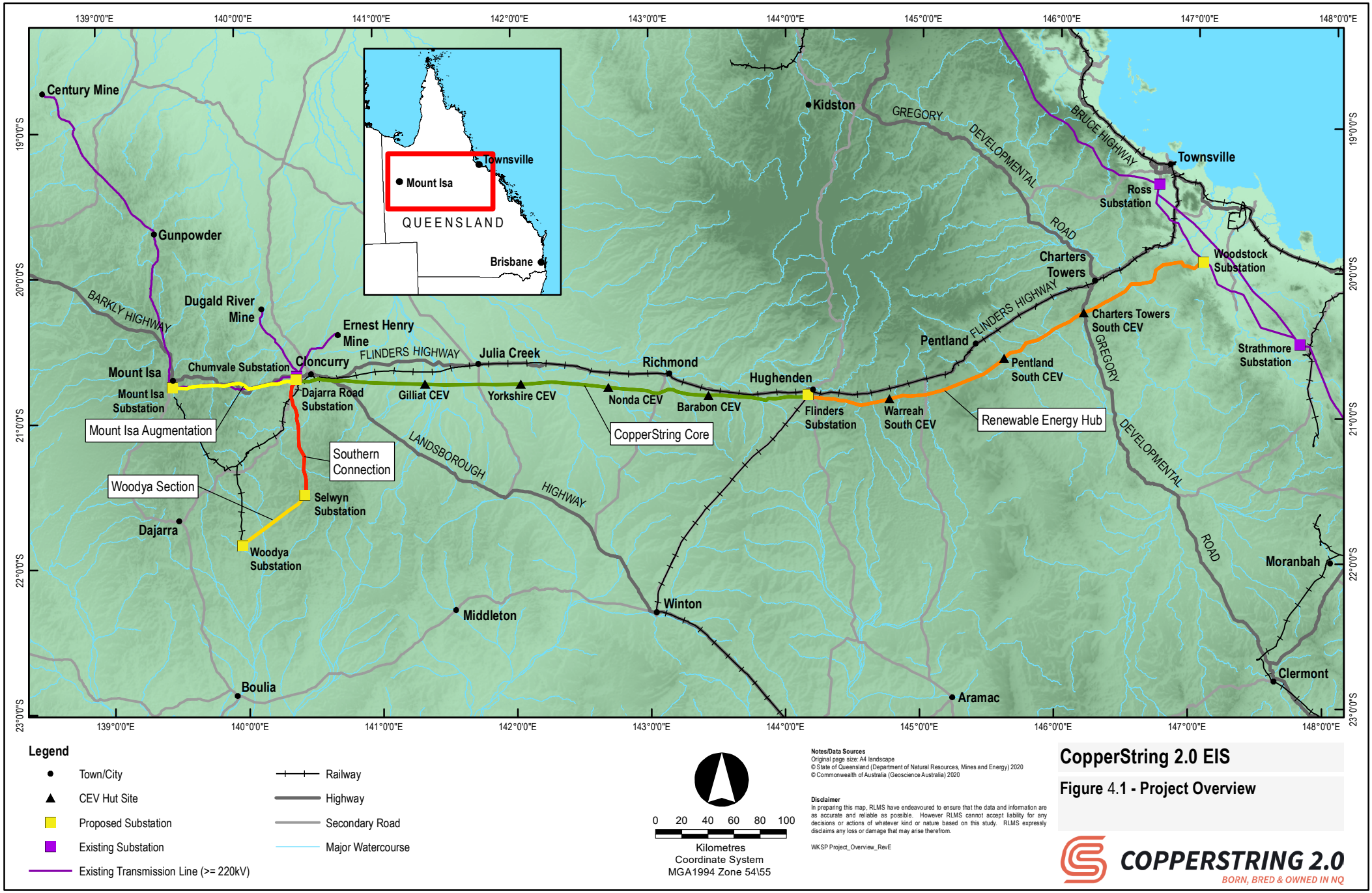
4.1.1 Revised corridor (alignment) selection

The major changes to the project description alignment include:

- The length of the Project is approximately 1000km long (previously 1,060km).
- The project will be divided into six sections (removing the Cannington and Kennedy connections):

- Woodstock Substation
- Renewable Energy Hub
- CopperString Core
- Mount Isa Augmentation
- Southern Connection
- Woodya Connection.

- All references to the section referred to as the Kennedy Connection (option) have been removed.
- The length of the Southern Connection section has been reduced by approximately 40km and the Selwyn substation has been repositioned to KP 91.4DS. All refences to the Cannington Connection section have been removed including references to the alignment from the KP 90DS to 130DS and KP 0SC to 24SC.
- All references to the Phosphate Hill section are renamed the Woodya section to be more consistent with the local parish name. The length of the Woodya Connection section has been reduced by approximately 1.4km to KP 61.40SW and the voltage of the transmission line from Selwyn to Woodya is 132 kV.
- The Woodstock Substation at Mulgrave has been repositioned approximately 1.1km southwest, to the southern side of Ayr Ravenswood Road.
- The connection to the existing Powerlink 275 kV Strathmore and Ross transmission networks consists of the Mulgrave substation and two sections of 275 kV double circuit transmission lines (each approximately 1km in length) eastwards from the Woodstock substation. The Mulgrave substation will be developed within the development footprint of the Woodstock substation, contiguous with the sites north-eastern boundary (refer Attachment D Revised Concept Infrastructure Plans).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146°0'0"E
147°0'0"E
148°0'0"E
19°0'0"S
20°0'0"S
21°0'0"S
22°0'0"S
23°0'0"S
Century Mine
Gunpowder
Dugald River Mine
Ernest Henry Mine
Mount Isa
Mount Isa Substation
Chumvale Substation
Cloncurry
Dajarra Road Substation
Julia Creek
Richmond
Hughenden
Flinders Substation
Gilliat CEV
Yorkshire CEV
Nonda CEV
Barabon CEV
Warreah South CEV
Pentland
Pentland South CEV
Charters Towers
Charters Towers South CEV
Kidston
Townsville
Ross Substation
Woodstock Substation
Strathmore Substation
Moranbah
Clermont
Winton
Middleton
Boulia
Aramac
Dajarra
Selwyn Substation
Woodya Substation
Mount Isa Augmentation
Southern Connection
Woodya Section
CopperString Core
Renewable Energy Hub
BARKLY HIGHWAY
FLINDERS HIGHWAY
LANDSBOROUGH HIGHWAY
GREGORY DEVELOPMENTAL ROAD
BRUCE HIGHWAY
QUEENSLAND
Townsville
Mount Isa
Brisbane
Legend
Town/City
CEV Hut Site
Proposed Substation
Existing Substation
Existing Transmission Line (>= 220kV)
Railway
Highway
Secondary Road
Major Watercourse
0 20 40 60 80 100
Kilometres
Coordinate System
MGA1994 Zone 54\55
Notes/Data Sources
Original page size: A4 landscape
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WKSP Project_Overview_RevE
CopperString 2.0 EIS
Figure 4.1 - Project Overview
COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ

Corridor Alignment

– identification of any changes made in response to submissions

Four (4) changes to the position of the corridor selection have been made in response to further consultation with landholders and submissions by mining tenure holders. Realignments were requested to reduce potential sterilisation of resources or in response to impacts on landholders infrastructure. Figure 4-2 shows the relationship between the draft EIS and SEIS corridor selection. The alignment revisions include:

- Alignment KPs 0-8 WD - Landholder requested move to Woodstock substation.
- Alignment KPs 268-277 WD - Landholder requested move to better align easement with property boundary.
- Alignment KPs 470-478 WD - Landholder requested move to better align easement with property boundary.
- Alignment KPs 700-704 WD - Mining lease holder requested an increase in the buffer between mining activities (mine pit where blasting occurs) and transmission infrastructure.

Corridor Alignment

– any updates to justification of route selection considering any project alignment/ description updates, including reference to the alignment through the Ballara Nature Refuge

Alignment changes to the corridor selection have been contained within existing allotments and do not impact any additional landholders or reduce the proximity of transmission or other related electrical infrastructure to the nearest sensitive receptors identified in the draft EIS (refer Volume 2 Chapter 10 Air and Greenhouse gas table 10-4).

All changes to the corridor selection remain within the original 2.5km study area investigated by the EIS established at the Project terms of reference stage and remain consistent with the aims and objectives of the Project Corridor Selection Report provided in Volume 3 Appendix D. Figure 4-2 shows the relationship between the draft EIS and SEIS corridor selection.

The corridor selection through the Ballara Nature Refuge has been developed in close consultation with the landholder who has signed an options agreement for the Grant of Easement with CuString Pty Ltd regarding CopperString 2.0. An assessment of alternative southern connections from Cloncurry, through the eastern portion of the Ballara Nature Reserve and onto Selwyn was included as part of the Draft EIS Volume 3 Appendix D Project Corridor Selection Report. The alignment has been flown by the landowners and in their view the proposed alignment is in the best location possible to avoid impacts to their land, the environmental values recognised within the Conservation Agreement to Establish Ballara Nature Refuge and its existing grazing use.

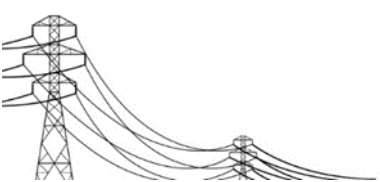
An alternative alignment route from Mt Isa south along the train line to Phosphate Hill has been considered during the corridor selection process. It was not selected as the preferred alignment for a range of reasons including but not limited to the following factors:

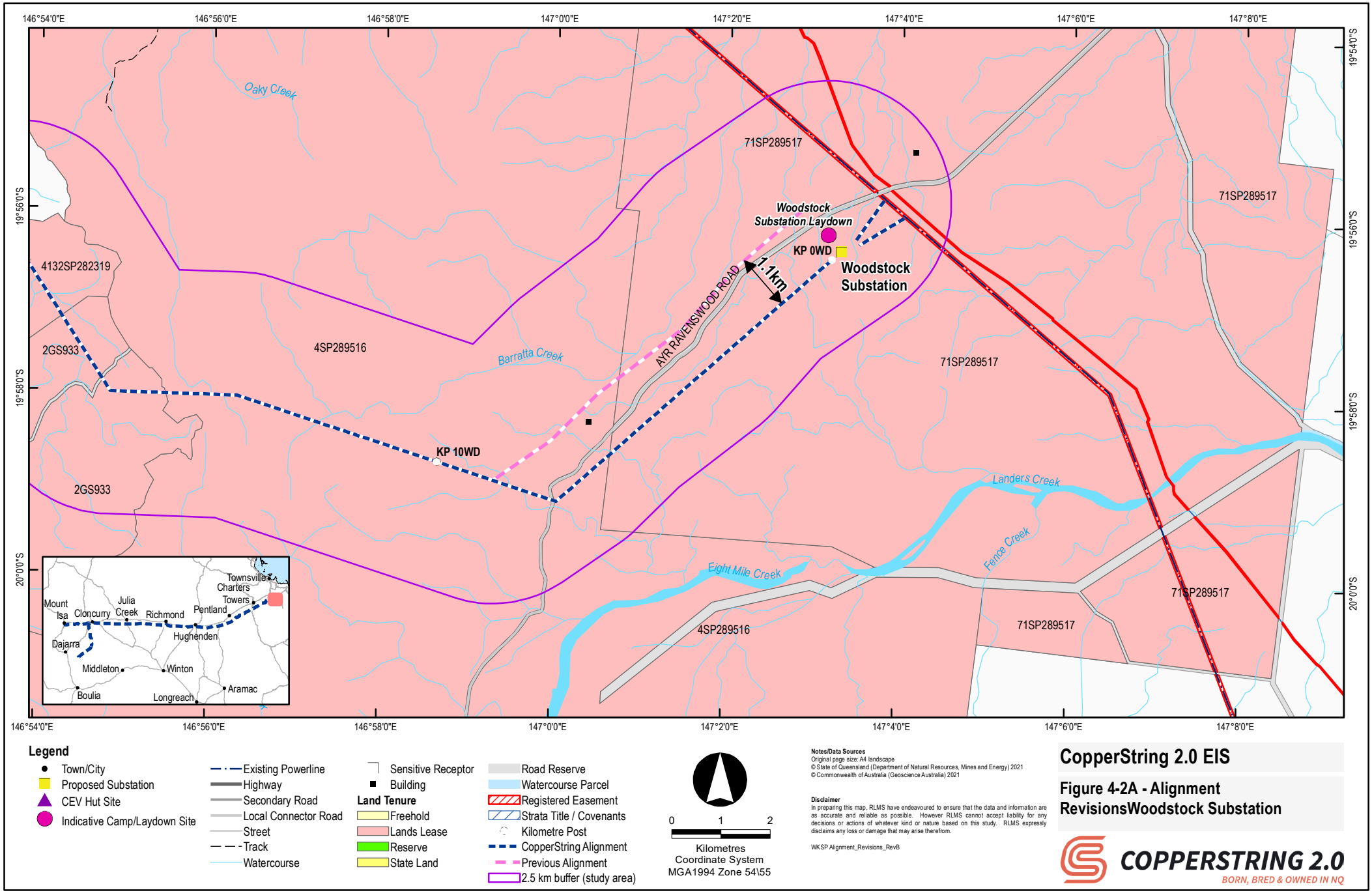
- The importance of the 220kv connection to Selwyn and the Selwyn substation to the project and the potential to service other mining activities directly south. The importance of this substation is also demonstrated in the voltage drop down to 132kv from Selwyn to Woodya. Any alternative from Mt Isa south would involve a 220kV line in the order of 140km to Woodya and then a further 61 km to Selwyn (resulting in total 220kV distance of 200km). The current project is 220kV Selwyn (approx. 90km) to then 132kV to Woodya (61km) which is considerably more efficient and economical and results in less voltage loss.

- Train lines and pipelines corridors are developed in a manner which is highly influenced by topography unlike transmission lines. There is a train line and petroleum pipeline which runs between Mt Isa and Phosphate Hill following in large part a similar corridor. The existing infrastructure developed between Mt Isa and Woody is not highly compatible with transmission lines and the buffer distances would likely result in the transmission line having to deal with either very rugged terrain or fall within large flood plains associated with the Leichhardt River, Leichhardt River (east branch), and Willis Creek.
- In addition a transmission corridor in close proximity to this existing infrastructure would include further design and access agreements that would need to be negotiated with the rail and pipeline entities to ensure no loss or impact on their operations.
- This alternative would introduce addition stakeholders who would be impacted by the project including land owners (who have not been engaged directly regarding the project) as well as additional mining tenure holders. The preferred alignment running south from Cloncurry is supported by the existing property owners who have been aware of the project since 2009-2010.
- An alternative route running down the western side of the Ballara Nature Reserve and back into Selwyn was investigated in Appendix C of the Corridor Selection Report (Vol 3 Appendix D of the Draft EIS) which was demonstrated to be unsuitable for a range of factors.
- Ballara Nature refuge already accommodates a mixture of mining, rural production activities and heavy infrastructure (road, rail, power) seemingly without any significant impact to the value of the area. The CopperString project has very limited earth works to establish towers at distances of greater than 500m apart. The Project will not result in measurable changes to river / creek, groundwater or surface water hydrology or supporting riparian regulated vegetation (key values in the Refuge).

Thereby, the shift away from the preferred alignment which has been in the public realm since 2010 (prior to the creation of the Refuge Agreements), has land owner approval, impacts less stakeholders, has less impacts on existing utilities and infrastructure and is more efficient and economical to service foundation or future customers is not justifiable or supported.

Notwithstanding, consultation between the landholder and Department of Environment and Science regarding the position of the corridor selection within the Ballara Nature Refuge has been ongoing since the draft EIS. Recent developments between the two parties have resulted in an understanding that the corridor selection as proposed can be excluded or revocated from the existing conservation agreement for the nature refuge.





Legend

- Town/City
- Proposed Substation
- CEV Hut Site
- Indicative Camp/Laydown Site
- Existing Powerline
- Highway
- Secondary Road
- Local Connector Road
- Street
- Track
- Watercourse
- Sensitive Receptor
- Building

Land Tenure

- Freehold
- Lands Lease
- Reserve
- State Land

- Road Reserve
- Watercourse Parcel
- Registered Easement
- Strata Title / Covenants
- Kilometre Post
- CopperString Alignment
- Previous Alignment
- 2.5 km buffer (study area)

0 1 2
Kilometres
Coordinate System
MGA1994 Zone 54\55

Notes/Data Sources
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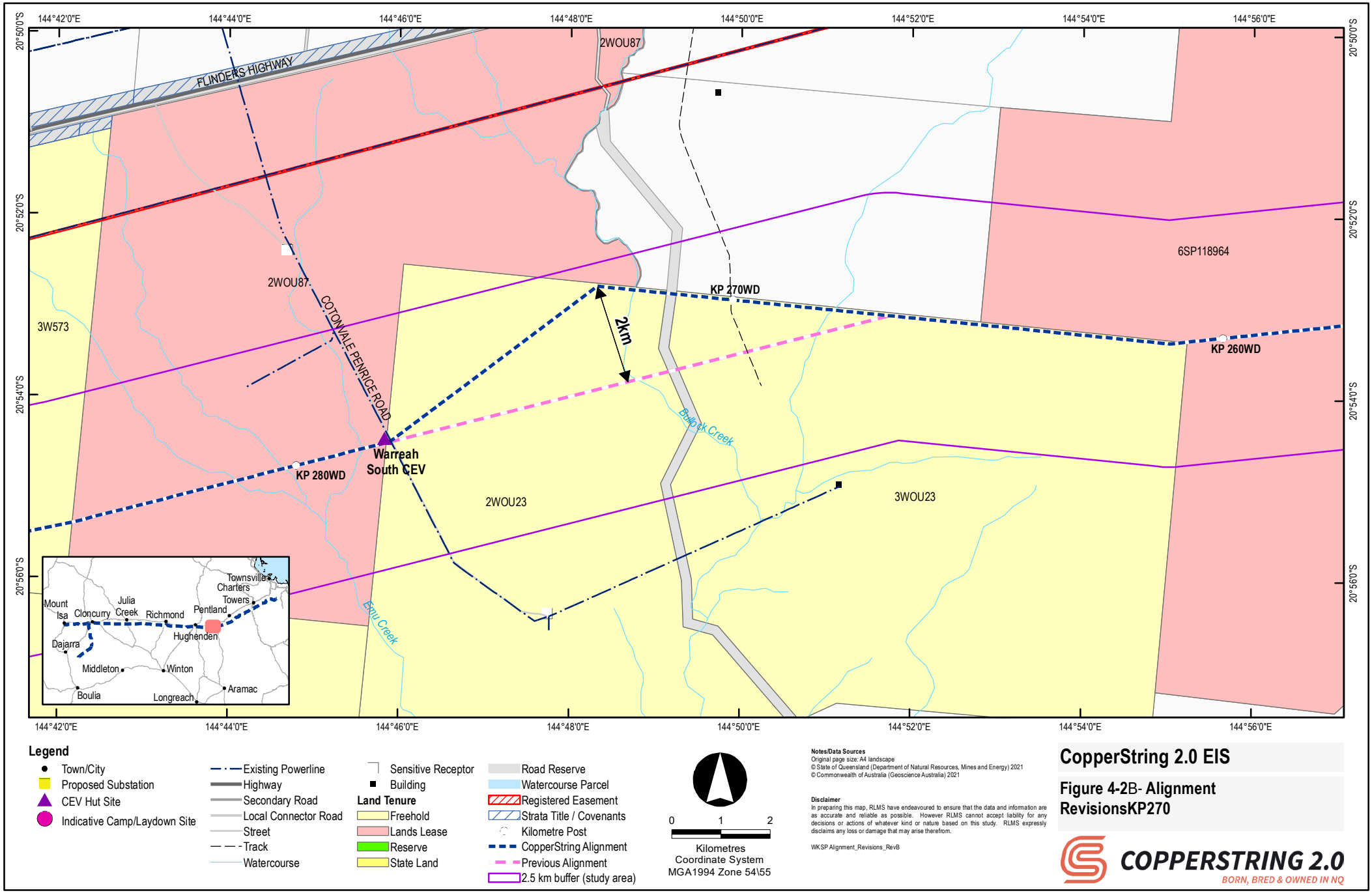
WKSP Alignment_Revisions_RevB

CopperString 2.0 EIS

Figure 4-2A - Alignment RevisionsWoodstock Substation

COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ



Legend

- Town/City
- Proposed Substation
- CEV Hut Site
- Indicative Camp/Laydown Site
- Existing Powerline
- Highway
- Secondary Road
- Local Connector Road
- Street
- Track
- Watercourse
- Sensitive Receptor
- Building

Land Tenure

- Freehold
- Lands Lease
- Reserve
- State Land
- Road Reserve
- Watercourse Parcel
- Registered Easement
- Strata Title / Covenants
- Kilometre Post
- CopperString Alignment
- Previous Alignment
- 2.5 km buffer (study area)

0 1 2

Kilometres
Coordinate System
MGA1994 Zone 54\55

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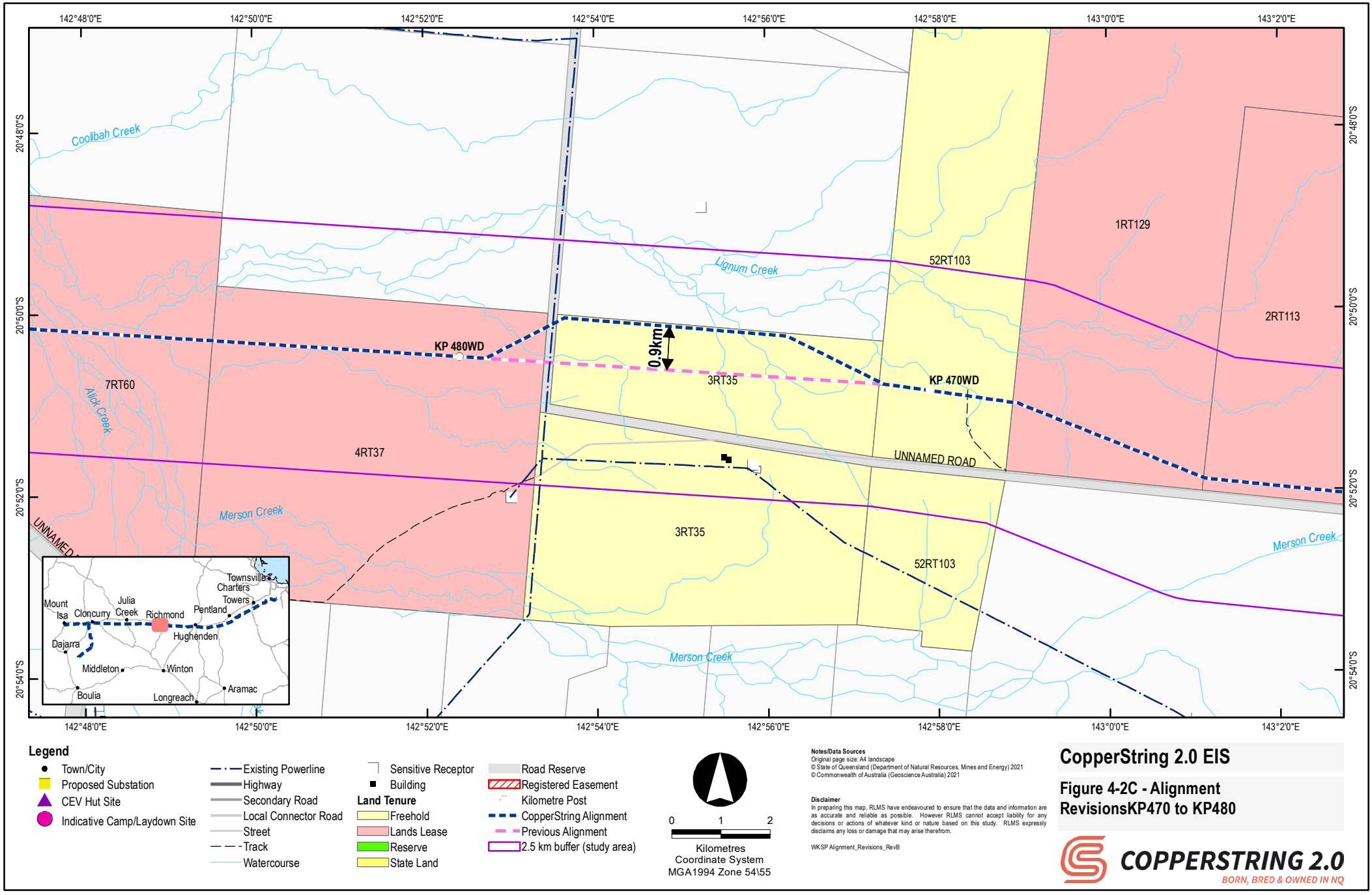
WKSP Alignment_Revisions_RevB

CopperString 2.0 EIS

Figure 4-2B- Alignment RevisionsKP270

COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ



Legend

- Town/City
- Proposed Substation
- CEV Hut Site
- Indicative Camp/Laydown Site
- Existing Powerline
- Highway
- Secondary Road
- Local Connector Road
- Street
- Track
- Watercourse
- Sensitive Receptor
- Building

Land Tenure

- Freehold
- Lands Lease
- Reserve
- State Land
- Road Reserve
- Registered Easement
- Kilometre Post
- CopperString Alignment
- Previous Alignment
- 2.5 km buffer (study area)

0 1 2
Kilometres
Coordinate System
MGA1994 Zone 54\55

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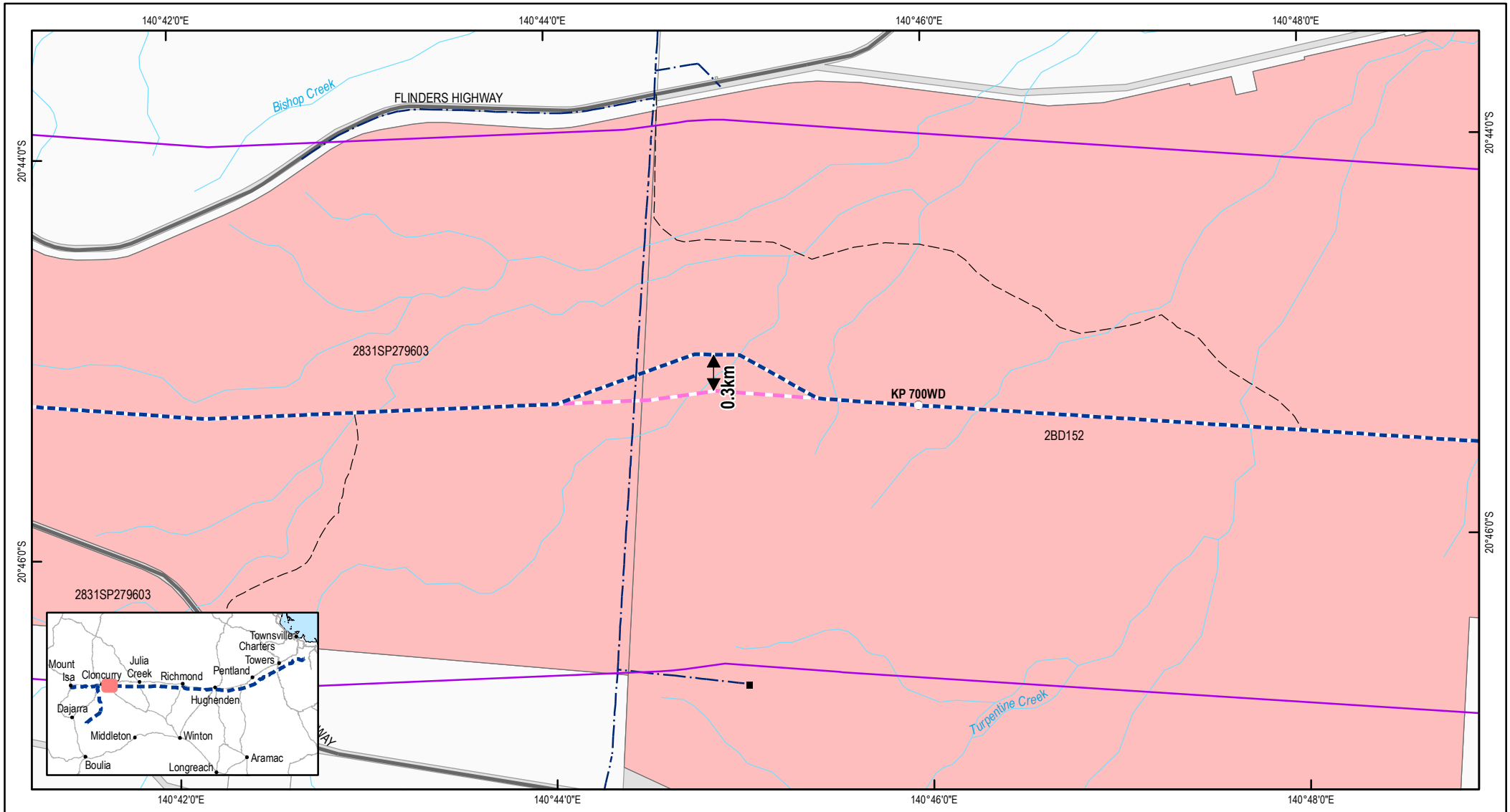
WKSP Alignment_Revisions_RevB

CopperString 2.0 EIS

Figure 4-2C - Alignment RevisionsKP470 to KP480

COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ



Legend

- Town/City
- Proposed Substation
- CEV Hut Site
- Indicative Camp/Laydown Site
- Existing Powerline
- Highway
- Secondary Road
- Local Connector Road
- Street
- Track
- Watercourse
- Sensitive Receptor
- Building

Land Tenure

- Freehold
- Lands Lease
- Reserve
- State Land
- Road Reserve
- Registered Easement
- Kilometre Post
- CopperString Alignment
- Previous Alignment
- 2.5 km buffer (study area)

0 1
Kilometres
Coordinate System
MGA1994 Zone 54\55

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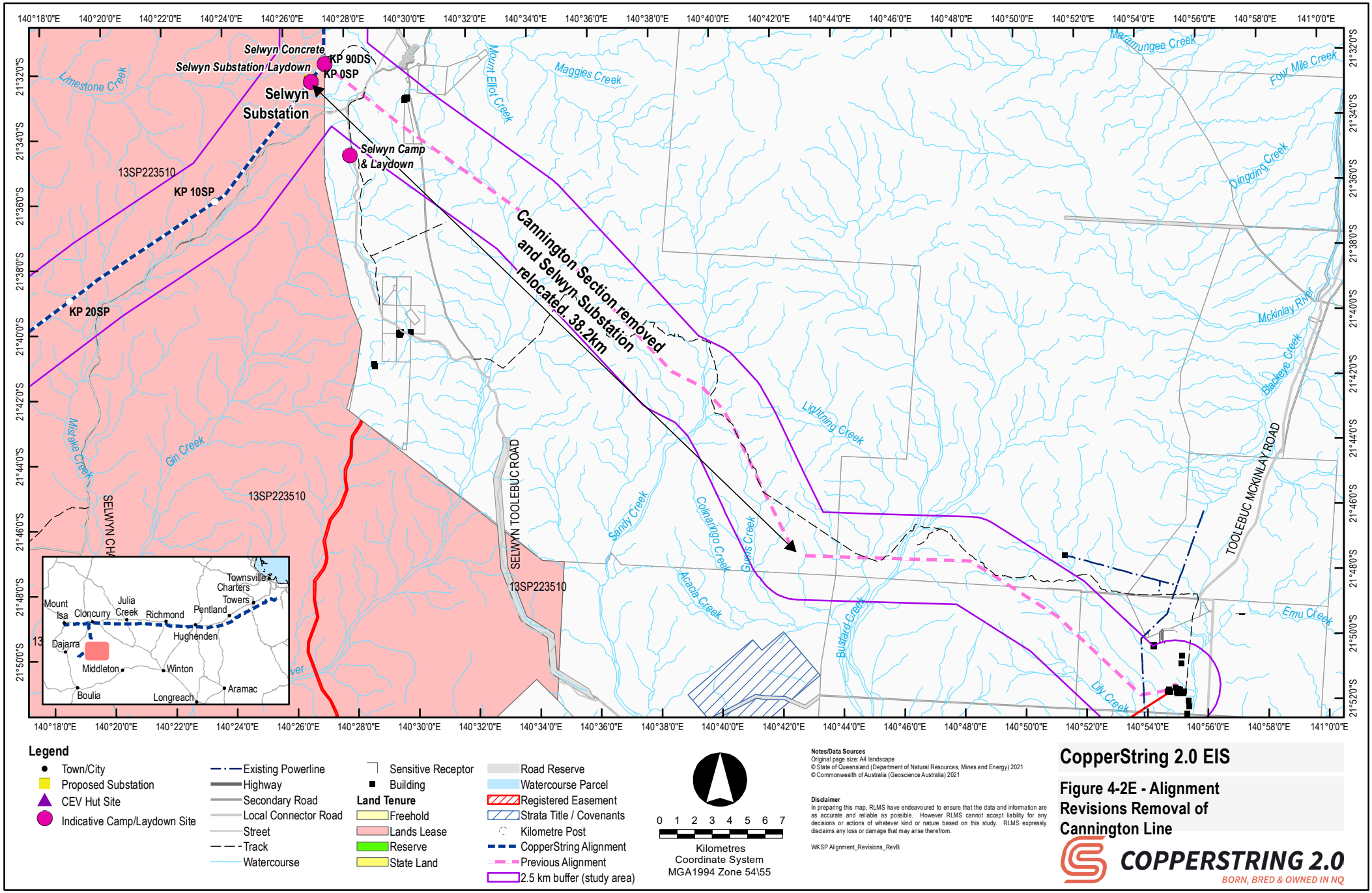
WKSP Alignment_Revisions_RevB

CopperString 2.0 EIS

Figure 4-2D - Alignment RevisionsKP700

COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ


Selwyn Concrete
Selwyn Substation Laydown
KP 90DS
KP 0SP
Selwyn Substation
Selwyn Camp & Laydown
13SP223510
KP 10SP
KP 20SP
Cannington Section removed and Selwyn Substation relocated. 38.2km
SELWYN TOOLEBUC ROAD
TOOLEBUC MCKINLAY ROAD
Limestone Creek
Mistake Creek
Gin Creek
Maggies Creek
Mount Elliot Creek
Lightning Creek
Sandy Creek
Colinaringo Creek
Gunnis Creek
Acacia Creek
Bustard Creek
Lily Creek
Emu Creek
Maramungee Creek
Four Mile Creek
Dingding Creek
Mckinlay River
Blackeye Creek
Townsville
Charters Towers
Julia Creek
Mount Isa
Cloncurry
Richmond
Pentland
Hughenden
Dajarra
Middleton
Winton
Aramac
Boulia
Longreach
Legend
Town/City
Proposed Substation
CEV Hut Site
Indicative Camp/Laydown Site
Existing Powerline
Highway
Secondary Road
Local Connector Road
Street
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Watercourse
Sensitive Receptor
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Land Tenure
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Lands Lease
Reserve
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Road Reserve
Watercourse Parcel
Registered Easement
Strata Title / Covenants
Kilometre Post
CopperString Alignment
Previous Alignment
2.5 km buffer (study area)
0 1 2 3 4 5 6 7
Kilometres
Coordinate System
MGA1994 Zone 54\55
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WKSP Alignment_Revisions_RevB
CopperString 2.0 EIS
Figure 4-2E - Alignment Revisions Removal of Cannington Line
COPPERSTRING 2.0
BORN, BRED & OWNED IN NQ

4.1.2 Revised Tower Siting Plans

The ECI JV has prepared a new concept design for the project which has been utilised as the basis for the SEIS impact assessment. The design spacing between towers has increased from 450m-500m in the draft EIS to between 500m-600m in the SEIS, which has significantly reduced the total number of towers along segments. In addition, the area required for brake and winch sites has also reduced. However, these is a requirement for larger tower assembly areas to enable some flexibility in construction methods and incorporate temporary laydown / stockpiles more frequently along the corridor selection. A schematic view of typical tower assembly and construction access is provided on Figure 4-3.

Revised concept tower siting plans (plan view and cross section) have been developed by the ECI JV for the following sections:

- Renewable Energy Hub – Woodstock to Flinders (Sheet 1 to 141)
- CopperString Core – Flinders to Dajarra Road (Sheet 1 to 163)
- Mount Isa Augmentation – Dajarra Road to Mt Isa (Sheet 1 to 39)
- Southern Connection – Dajarra Road to Selwyn (Sheet 1 to 37)
- Woodya Connection – Selwyn to Woodya (Sheet 37 to 45).

Mapping

- Provide updated maps in the revised draft EIS identifying any realignments to the corridor or changes to the location of project components (e.g. transmission towers, access roads etc.) since the draft EIS. Both the draft EIS alignment and the updated alignment are to be clearly identified.
- Updated shapefiles for the project are also to be provided to the OCG

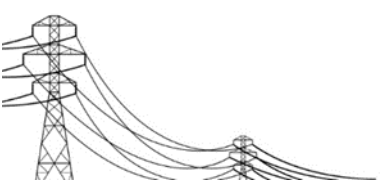
Tower locations have been mapped on concept tower siting plans are provided within Volume 4 Attachment C and supersede those provided within Volume 3 Appendix H.

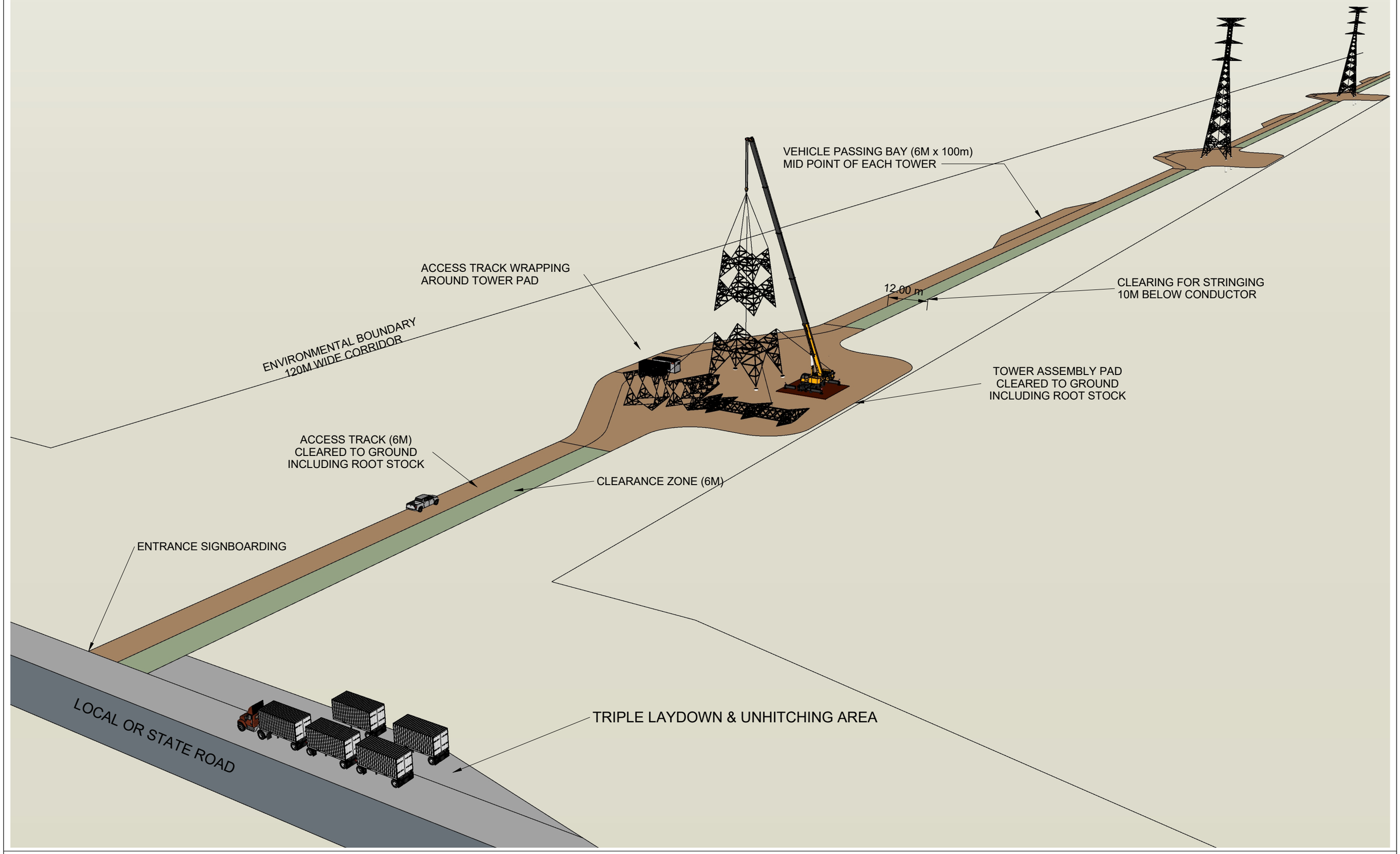
In addition, further mapping information regarding the siting of towers assembly areas and brake and winch sites with land levels, vegetation coverage / density and proximity to waterways and watercourses is provided on the Conductor Vegetation Clearing and Work Analysis Plans in Volume 4 Attachment F Additional information flora and fauna. These plans provide annotated comments and provide further design recommendations regarding the placement and reconfiguration of temporary disturbance areas. A schematic view of typical tower assembly and construction access provided on Figure 4-3 shown an allowance for passing bays. Disturbance of vegetation for the access track (6.0m wide) with vehicle passing accommodated within the line of sight (also 6.0m wide) which adjoins the access track. The vehicle access track running along the corridor selection will be retained as the operational 4WD access for maintenance crews.

The final configuration of components including conductor size, tower structure type, the height and size of towers will not be confirmed until the detailed design has been completed (post EIS). Impacts for the concept design have been quantified through a GIS platform providing a greater level of confidence in impact (residual and non-residual) calculations than was possible during the draft EIS stage.

A construction work methodology simulation diagram has been provided to outline the varies stages in the construction process for various activities including, establishment, tower assembly and stringing and substation foundation works. These processes are shown on Figure 4-4. Updated shapefiles have also been provided separately to the Office of the Coordinator General which confirm temporary and permanent disturbances for infrastructure. These files cover all aspects

requested including brake and winch sites, camps and laydowns, CEV huts and access, corridor selection easement, substation footprint and construction areas, tower assembly areas and tower pads and a chainage line.





CPB CONTRACTORS UGL

CPB UGL Joint Venture

CONTRACTOR
CPB UGL Joint Venture
Level 6
199 Grey Street
South Brisbane
QLD 4101

CLIENT
Copperstring 2.0
Level 14
40 Creek Street
Brisbane
QLD 4000

ISSUE
18-05-2021

PROJECT
Copperstring 2.0

CREATED BY
Ben Petrie

PROJECT NO.
Q1782-SKT-CIV-WA00-105001_3

Figure 4-3 TYPICAL AREA ACCESS

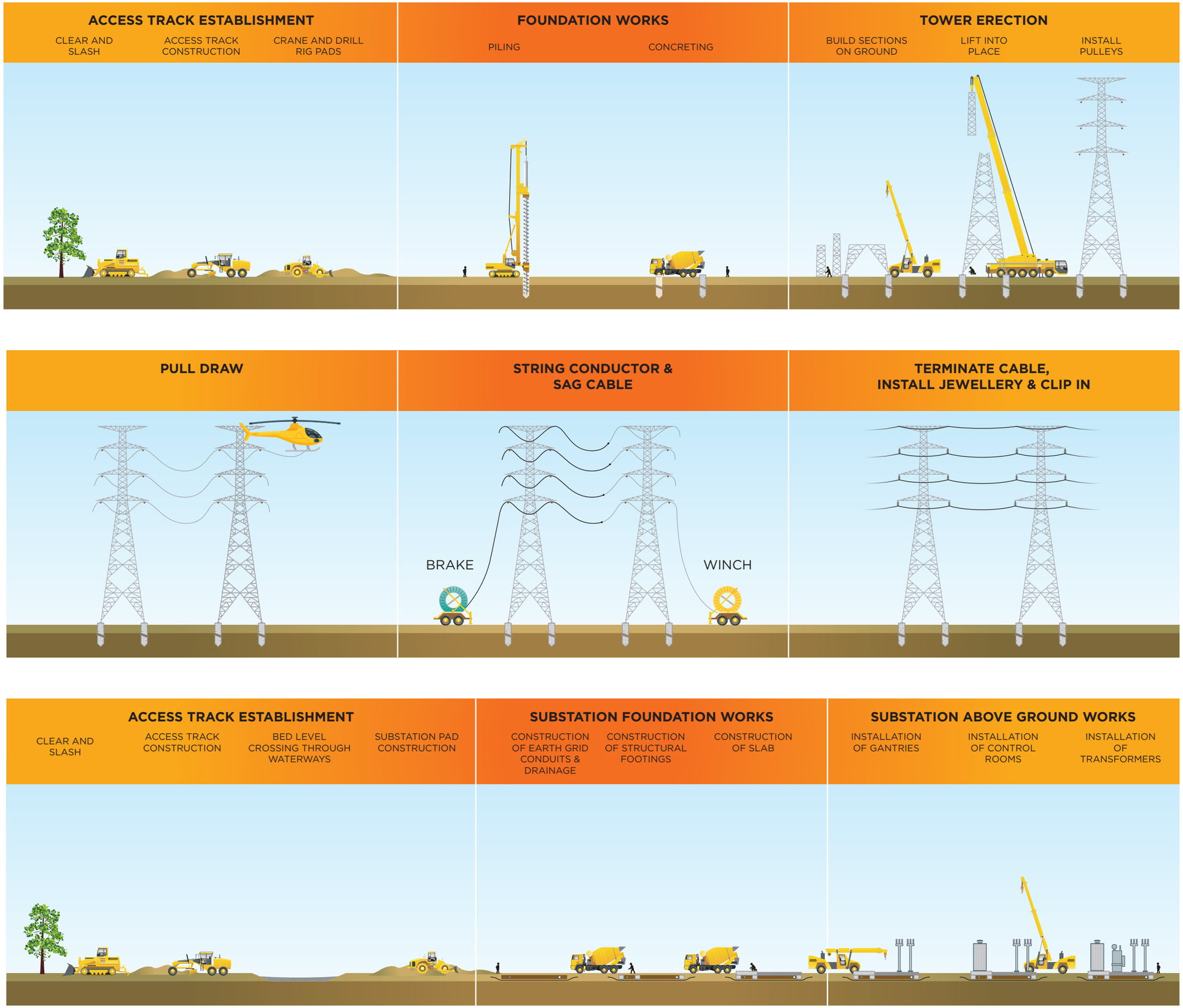


Figure 4-4 Construction Work Methodolody Simulation Diagram

4.1.3 Revised Infrastructure – Substation and CEV Huts

Changes have also been made to the number and location of substations and CEV huts as the Project design has progressed since the draft EIS. These changes have resulted from further consultation with landowners, design optimisation and more detailed site investigations including ecological, geotechnical and cultural heritage surveys. The following changes to substation have been made:

- Woodstock substation has been relocated approximately 1 km south east of its proposed location in the draft EIS due to landholder feedback.
- Selwyn substation has moved 38 km north west of its proposed location in the draft EIS and the Cannington substation is no longer a part of the project.
- Phosphate Hill substation is now referred to as Woodya substation to be more consistent with the local parish name.

The following changes have been made in relation to CEV Huts:

- The Selwyn CEV is no longer a part of the project and all references to the Selwyn CEV hut are removed.

The ECI JV have also developed new concept infrastructure plans for the Project. Revised concept infrastructure plans for the aspects listed below are provided within Volume 4 Attachment D and supersede those provided within Volume 3 Appendix I.

Construction Accommodation Camps and Laydowns

- Charters Towers Camp
- Cloncurry Camp
- Dajarra Laydown
- Flinders Laydown Office
- Hughenden Camp
- Julia Creek Camp
- Mt Isa Laydown Office
- Pentland Camp
- Phosphate Hill Laydown Office
- Richmond Camp
- Selwyn Camp
- Selwyn Laydown
- Woodstock Laydown Office

CEV Huts

- Barabon
- Charters Towers South
- Gilliat
- Nonda
- Pentland South
- Warreah South
- Yorkshire

Substation (system general arrangement)

- Dajarra Road
- Flinders
- Mt Isa
- Mulgrave (collocated with Woodstock)
- Selwyn
- Woodstock
- Woodya

Substation (land requirements)

- Dajarra Road
- Flinders
- Mount Isa
- Selwyn
- Woodstock
- Woodya

Corridor Alignment

– an assessment of any additional impacts or benefits of the changes.

Modifications to the project description made since the draft EIS have occurred following:

- additional consultation with landholders and in response to individual submissions
- a review of customers supply points
- further design and construction related investigations undertaken by the ECI JV.

The revised corridor alignment has resulted in a reduction to the overall project length of approximately 60km and consequently resulted in other changes in other areas of the project description such as number of road crossings, volumes of materials required and clearing areas.

The position and land requirements for workers accommodation camps and laydowns have reduced and the expected locations have aligned with the expectations of local residents and regional councils. More consultation is expected with landholders and Councils before the final position of these facilities can be confirmed.

Aspects which have been updated include changes to the expected project activities, quantification of impacts to land, flora and fauna habitat and greenhouse gas emissions. Further assessments of these item have been provided in sections:

- Additional information land
- Additional information MNES
- Additional information MSES
- Additional information cumulative impacts.

All changes to the project description are summarised in sections 4.1.1 to 4.1.6 and Volume 4 Attachment B Revised Project Description. Figure 4-2 which provides a map series showing SEIS Project including all changes to the transmission corridor selection, substation locations and CEV Hut locations.

Corridor Alignment

– As necessary, identify additional management and mitigation measures and any additional commitments associated with corridor alignment changes.

It is noted that the changes to the project description are considered relatively minor on the basis that they have not altered the findings of the impact assessment or proposed management and mitigation measures documented throughout Volume 2 or included within Volume 3 of the draft EIS.

In addition, various management plans have now been developed by the ECI JV since the draft EIS was completed. These plans are still under development, however initial draft versions have been provided to demonstrate how and when key risks will be managed during construction.

The Project commitments register has been revised to include references to these ECI JV documents where applicable. Further assessments of these item have been provided in section 4.13. All management plans and the revised commitments register is provided within Volume 4 Attachment I.

Corridor Alignment

– Identify how the potential sterilisation of resources has been considered in the corridor selection, and any changes to the alignment in response to stakeholder feedback or submissions on the draft EIS.

In response to submissions from Department of Resources and Department of Agriculture and Fisheries, the current and future use of land within the easement for agricultural purposes has been considered in agreements with landholders to avoid sterilisation of the land. Land option agreements are confidential and may differ to meet the requirements of each landholder. Notwithstanding, the consideration of existing and future land uses has not resulted in changes to the corridor selection. Refer to submission response 11 and 17 provided in Volume 4 Attachment A.

Mining tenements were contacted, consulted, and notified of the publication of the Draft EIS including links to the Draft EIS and advice on making submissions. In response to submission 18, CuString has reviewed the corridor selection between KPs 700-704 WD and realigned the corridor selection to increase the buffer distance between the corridor and the pits on ML100111. This alignment change sent to Round Oak Minerals for comment. Mapping of the new corridor alignment in relation to Round Oak Minerals are shown on Figure 4-2. A full response to submission 18 is provided in Volume 4 Attachment A.

Ongoing consultation with tenement owners resulted in some requesting changes to the alignment, these changes were captured in Volume 3 Attachment D Corridor Selection Report.

Corridor Alignment

– Identify how risks to existing powerline infrastructure has been considered in the corridor selection and discuss how any potential impacts or residual risks will be managed.

The Project has identified 46 locations where the CopperString transmission line will need to cross existing Ergon transmission lines. Additional mitigation and management activities to decrease the risk associated with existing powerline infrastructure to mitigate potential impacts and risks at these crossing points including the following:

- All existing high voltage powerlines less than 220 kV will be relocated underground at each crossing point prior to stringing activities being undertaken
- High voltage crossings greater than 220kV will be protected during crossing works with cranes and hurdles.

The exception to these mitigation measures is the 66kV Winton crossing on the line between Woodstock and Dajarra as this is critical Ergon asset. This crossing will need minimal outages and therefore single span stringing and live line hurdling will be used. The ECI JV has also produced management plans which relate to the hazard, health and safety:

- Risk Management Plan
- Heli-stringing plan
- Bushfire Management Plan

CuString is in ongoing negotiations with Ergon regarding service crossings to confirm design technical specification. These discussions will have a direct influence on the detailed design process. Construction methodologies are also being developed with the asset owner and these details are not available at this time. Where the corridor selection is within proximity to existing Ergon transmission lines, existing established vehicle access tracks will be utilised, particularly along the Mt Isa Augmentation section.

4.1.4 Corridor access

Corridor Access

– Identify which proposed access tracks are to be permanent and which are to be temporary

– Provide detail on how the transmission lines and towers will be maintained and repaired during operation of the project, particularly where permanent maintenance access tracks are not proposed.

At the time of the Draft EIS it was difficult to confirm with confidence where new or the use of existing vehicle access tracks would be required to facilitate construction and meet the logistical requirements of the project. The ECI JV has developed construction quantity registers which outlines where the corridor selection crosses existing roads and tracks. It is expected that a 6.0m wide vehicle access track will be developed between towers along the corridor selection which will remain in place as a 4WD access track to provide vehicle access to towers and enable monitoring and maintenance to occur during the operational phase of the project. An accompanying Figure 4-5 provides an overview access to the nine work hubs across the alignment and includes where existing and any new access tracks are expected.

4.1.5 Revised Infrastructure – Accommodation Camps, Construction laydown areas

Workers Accommodation

– Provide details and maps identifying proposed access and evacuation routes for workers' accommodation facilities

The Project alignment has been broken down into nine work hubs for travel and accommodation with seven hubs having dedicated workforce camps and two work hubs using existing local accommodation. Mt Isa and Woodstock (or Ayr) will now utilise existing accommodation facilities in these locations. Workers accommodation demands during the construction of the Woodya substation is expected to utilise the Phosphate Hill mine camp or accommodation at the Selwyn camp.

The towns at which camps will be located have not changed from the Draft EIS, however, indicative locations have been negotiated with some councils and camp footprints have been developed by the ECI JV. Construction laydown areas will be located at either camps or substations with no extra laydown areas required outside of these areas. This new information has been provided in Attachment D Revised Concept Infrastructure plans which include updated indicative site layout and locality plans.

Further information regarding camps has been provided within the ECI JV Accommodation Management Plan in Volume 4 Attachment I Additional Management Plans. This management plan is still under development, however initial draft version has been provided.

Table 4-1 Road Crossing Register

Local + Access | Local + Align | State + Access | State + Align

Copperstring 2.0 **Road Crossings**

							Road Crossing Type				Crossing Works								Location	
							Local Roads (Council)		State Controlled Roads (TMR)											
Line No.	Line From	Line To	Road Crossing No.	Road Name	Track ID	FID	Access Track	Alignment	Access Track	Alignment	Turn In - Ashpalt	Turn In - Gravel	Culvert Upgrade/Install	Bridge Upgrade	Turning Lane (Asphalt)	Shoulder Widening - Minor Gravel	Shoulder Widening - Major Asphalt	Stringing Traffic Control Crossing	Latitude	Longitude
L1	Woodstock Substation	Flinders Substation	Road_01	Ayr Ravenswood Road	L1-638-3	63			1		1		1		1				-19.93366389640	147.05018438100
			Road_02	Ayr Ravenswood Road	L1-619-2	59			1		1		1		1				-19.98580855340	147.00003539100
			Road_03	Ayr Ravenswood Road	202103017087	1				1								1	-19.98590770140	147.00006712800
			Road_04	Avoca Vale Road	L1-609-43	95	1					2				1			-19.97596919840	146.79689077600
			Road_05	Burdekin Falls Dam Road	202103054816	4				1								1	-19.98509615140	146.72816032000
			Road_06	Burdekin Falls Dam Road	L1-548-2	61			1		2		1		1		1		-19.98505440740	146.72807798000
			Road_07	Silver Valley Road	L1-546-3	94	1					2				1			-19.98665603840	146.71727892000
			Road_08	Silver Valley Road	L1-537-2	92	1					2				1			-20.02211640340	146.70326094100
			Road_09	Silver Valley Road	202103395516	24		1										1	-20.02228422040	146.70331702100
			Road_10	Silver Valley Road	202,103,395,515	26		1										1	-20.04964868340	146.69831426000
			Road_11	Silver Valley Road	L1-518b(TR)-15	90	1					2				1			-20.04961955240	146.69823434800
			Road_12	Track - No Name	-	23		1										1	-20.09057002140	146.62428655200
			Road_13	Track - No Name	L1-510-2	87	1					2				1			-20.09066527140	146.62420282000
			Road_14	Amity Road	L1-507-7	89	1					2				1			-20.05736498940	146.60065800000
			Road_15	Track - No Name	L1-518b(TR)-16	96	1					2				1			-19.89923752340	146.59624651500
			Road_16	Flinders Highway	L1-518b(TR)-16	64			1		1		1		1		1		-19.89784665340	146.59436967800
			Road_17	Lornesleigh Road	L1-472-2	85	1					2				1			-20.14817689840	146.48742984800
			Road_18	Lornesleigh Road	202,103,212,820	11		1										1	-20.14817308040	146.48749207200
			Road_19	Cameron Downs Road	202,103,060,583	2		1										1	-20.15992612940	146.46760164600
			Road_20	Cameron Downs Road	L1-468-2	83	1					2				1			-20.15986853940	146.46756089300
			Road_21	Gregory Developmental Road	L1-402b-9	58			1		2		1		1		1		-20.15102892840	146.22532120900
			Road_22	Bluff Road	L1-441-1	80	1					2				1			-20.22752426540	146.33934425100
			Road_23	Bluff Road	L1-440-2	81	1					2				1			-20.22716873340	146.33914315400
			Road_24	Bluff Road	202,103,036,525	1		1										1	-20.22747816740	146.33931817700
			Road_25	Mountain View Road	202,103,247,048	18		1										1	-20.24337189840	146.30838695000
			Road_26	Mountain View Road	L1-437-4	78	1					2				1			-20.24328254740	146.30837898800
			Road_27	Track - No Name	202,103,347,091	20		1										1	-20.26928237540	146.26565435700
			Road_28	Track - No Name	L1-424-2	76	1					2				1			-20.26918710840	146.26565212800
			Road_29	Gregory Developmental Road	202,103,152,704	13				1								1	-20.30135594040	146.18401654200
			Road_30	Gregory Developmental Road	L1-402b-8	55			1		2		1		1		1		-20.30127686340	146.18399619500
			Road_31	Trafalgar Road	-	29		1										1	-20.34653695940	146.10389985700
			Road_32	Trafalgar Road	L1-390-2	74	1					2				1			-20.34644969340	146.10388546900
			Road_33	Track - No Name	L1-350-5	73	1					2				1			-20.38833098940	145.88740692000
			Road_34	Flinders Highway	L1-316a-5	54			1		1		1		1		1		-20.37927812340	145.62793711600
			Road_35	Helenslee Road	L1-347-33	71	1					2				1			-20.51803891840	145.76162676500
			Road_36	Helenslee Road	-	9		1										1	-20.51805968640	145.76171350300
			Road_37	Helenslee Road	L1-316a-4	72	1					2				1			-20.50966404040	145.70954784000
			Road_38	Longton Road	202,103,212,329	12		1										1	-20.62008644040	145.60838327000
			Road_39	Longton Road	L1-262a-21	69	1					2				1			-20.62001379740	145.60832615900
			Road_40	Lauderdale Road	L1-261-5	65	1					2				1			-20.70362223140	145.41009417000
			Road_41	Lyons Creek Road	L1-226-23	59	1					2				1			-20.73318332240	145.19274871800
			Road_42	Lyons Creek Road	202,103,215,112	10		1										1	-20.84190047040	145.17459816200
			Road_43	Lyons Creek Road	L1-192-2	25	1					2				1			-20.84169854340	145.17461439100
			Road_44	Aramac Torrens Creek Road	202,103,011,611	5				1								1	-20.87871300040	145.02648128400
			Road_45	Aramac Torrens Creek Road	L1-164-2	6			1			2				1			-20.87855436340	145.02642213400
			Road_46	Cotonvale Penrice Road	202,103,086,516	5		1										1	-20.90855539440	144.76530766000
			Road_47	Cotonvale Penrice Road	L1-111b-8	15	1					2				1			-20.90841521940	144.76522796800
			Road_48	Redcliffe Road	202,103,326,733	22		1										1	-20.90650681340	144.27976880100
			Road_49	Redcliffe Road	-	31		1										1	-20.90650502240	144.27973887400
			Road_50	Redcliffe Road	L1-44-20	17	1					2				1			-20.90632874940	144.27969526600
			Road_51	Redcliffe Road	L1-24-2	18	1					2				1			-20.90632716440	144.27966885800
			Road_52	Hughenden Muttaburra Road	202,103,172,518	8				1								1	-20.90021281540	144.20286053500
			Road_53	Hughenden Muttaburra Road	L1-10-2	2			1		2				1		1		-20.90002931540	144.20286705100
			Road_54	Kennedy Development Road	202,103,190,029	6				1								1	-20.88710528840	144.17602174100
			Road_55	Kennedy Development Road	L1-4-2	4			1		2				1		1		-20.88697335240	144.17613677600
L2	Flinders Substation	Dajarra Road Substation	Road_56	Flinders Highway	L2-679-12	12			1		1		1		1		1		-20.86524748540	143.98161025800
			Road_57	Thornhill Tamworth Road	202,103,422,893	27		1										1	-20.90090532440	143.74692761500
			Road_58	Thornhill Tamworth Road	L2-612A-14	19	1					2				1			-20.90075011140	143.74702896500
			Road_59	Marathon Stamford Road	202,103,222,228	15		1										1	-20.88827394040	143.56760719000
			Road_60	Marathon Stamford Road	L2-592-2	21	1					2				1			-20.88811190440	143.56761731800
			Road_61	Barabon Terranburby Road	202,103,020,643	3		1										1	-20.88548961540	143.42966693400
			Road_62	Barabon Terranburby Road	L2-566-2	23	1					2				1			-20.88532315540	143.42967997700
			Road_63	Track - No Name	L2-549-25	33	1					2				1			-20.81968982740	143.19663031200
			Road_64	Richmond Winton Road	202,103,329,869	10				1								1	-20.86721751040	143.07383680700
			Road_65	Richmond Winton Road	L2-488A-10	10			1		2		1		1		1		-20.86700766740	143.07392290300
			Road_66	Pattel Drive	L2-488A-11	60	1				2		1		1		1		-20.72484796240	143.13311531700
			Road_67	Flinders Highway	L2-467-8	44			1		1		1		1		1		-20.73356400040	142.90179089300
			Road_68	Track - No Name	202,103,338,445	21		1										1	-20.83327663040	142.74674920000
			Road_69	Track - No Name	L2-434-2	30	1					2				1			-20.83308136240	142.74653337500
			Road_70	Minamere Nelia Road	202,103,236,869	14		1										1	-20.78758152840	142.25145234300
			Road_71	Minamere Nelia Road	L2-343-2	40	1					2				1			-20.78741742540	142.25132317000
			Road_72	Proa Road	202,103,295,779	19		1										1	-20.79654798640	142.11205294000
			Road_73	Proa Road	L2-317-2	36	1					2				1			-20.79638552040	142.11191258300
			Road_74	Yorkshire Road	202,103,566,901	30		1										1	-20.79882896840	141.90499855900
			Road_75	Yorkshire Road	L2-280-2	34	1				2		1		1		1		-20.79866888340	141.90485497700
			Road_76	Yorkshire Road	L2-351A-11	68	1					2				1			-20.65732821240	141.76762374800
			Road_77	Julia Creek Kynuna Road	202,103,185,015	3				1								1	-20.79655357440	141.74239529700
			Road_78	Julia Creek Kynuna Road	L2-250-2	17			1		2		1		1		1		-20.79639039740	141.74239063100
			Road_79	Ivellen Road	202,103,178,135	8		1										1	-20.78887963440	141.34463027800
			Road_80	Ivellen Road	L2-178-2	38	1					2			1				-20.78880109240	141.34463741200
			Road_81	Oorindi McKinlay Road	L2-115-4	55	1					2			1				-20.74615917440	141.06946717500
			Road_82	Oorindi McKinlay Road	202,103,267,670	16		1										1	-20.77746138140	141.05244796200
			Road_83	Oorindi McKinlay Road	L2-125-2	46	1					2			1				-20.77729251040	141.05254006400
			Road_84	Flinders Highway	L2-111-15	53			1		1		1		1		1		-20.64607185540	140.91928491500
			Road_85	Flinders Highway	L2-78-81	47			1		1		1		1		1		-20.72674153140	140.75604537200
			Road_86	Flinders Highway	L2-70-7	46			1		1		1		1		1		-20.72882881540	140.74341242100
			Road_87	Landsborough Highway	L2-66-5	24			1		2		1		1		1		-20.77330671840	140.70362331400
			Road_88	Landsborough Highway	L2-59-7	37			1		2		1		1		1		-20.75617418940	140.67050773200
			Road_89	Landsborough Highway	202,103,202,391	14				1								1	-20.75220751740	140.66586556700
			Road_90	Landsborough Highway	L2-53-2	41			1		2		1		1		1		-20.74884306540	140.66001599800
			Road_91	Landsborough Highway	L2-50-2	42			1		2		1		1		1		-20.74371817440	140.64819321600

							Road Crossing Type				Crossing Works								Location	
							Local Roads (Council)		State Controlled Roads (TMR)											
Line No.	Line From	Line To	Road Crossing No.	Road Name	Track ID	FID	Access Track	Alignment	Access Track	Alignment	Turn In - Ashpalt	Turn In - Gravel	Culvert Upgrade/Install	Bridge Upgrade	Turning Lane (Asphalt)	Shoulder Widening - Minor Gravel	Shoulder Widening - Major Asphalt	Stringing Traffic Control Crossing	Latitude	Longitude
			Road_92	Landsborough Highway	L2-47-4	45			1		2		1		1		1		-20.73293397940	140.63437803100
			Road_93	Round Oak Road	202,103,362,900	25		1										1	-20.74166363140	140.54784083800
			Road_94	Round Oak Road	L2-30-1	56	1					2				1			-20.74150937340	140.54777207300
			Road_95	Round Oak Road	L2-29-4	58	1					2				1			-20.73423818340	140.52766378600
			Road_96	Track - No Name	L2-41-12	61	1				2		1		1		1		-20.71856013040	140.52641279900
			Road_97	Chinaman Creek Dam Road	L2-11-2	62	1					2				1			-20.71579302040	140.47900992000
			Road_98	Barkly Highway	L2-10-4	49			1		2		1		1		1		-20.71804678840	140.44980373600
			Road_99	Cloncurry Duchess Road	L4-14-9	33			1		2		1		1		1		-20.76081979840	140.41110212300
			Road_100	Cloncurry Duchess Road	L2-7-5	39			1		2		1		1		1		-20.75122010840	140.41213325300
			Road_101	Cloncurry Duchess Road	202,103,077,700	2				1								1	-20.74910126340	140.41125409000
L3	Dajarra Road Substation	Mount Isa	Road_102	Barkly Highway	L3-194-4	48			1		1		1		1		1		-20.71885497940	140.39375998500
			Road_103	Barkly Highway	L3-190-12	51			1		1		1		1		1		-20.71506184440	140.33120897700
			Road_104	Barkly Highway	L3-174-7	43			1		1		1		1		1		-20.73769500340	140.27906078800
			Road_105	Barkly Highway	L3-162A-9	30			1		1		1		1		1		-20.76176629840	140.22325783200
			Road_106	Barkly Highway	L3-155-4	27			1		1		1		1		1		-20.76698126740	140.19759288600
			Road_107	Barkly Highway	L3-148-5	26			1		1		1		1		1		-20.77291219540	140.15786403900
			Road_108	Barkly Highway	L3-144-5	26			1		1		1		1		1		-20.77298098740	140.15524047500
			Road_109	Barkly Highway	L3-141-4	22			1		1		1		1		1		-20.78145672340	140.11815893900
			Road_110	Barkly Highway	L3-135B-4	21			1		1		1		1		1		-20.78450033240	140.09616082800
			Road_111	Barkly Highway	L3-130A-3	20			1		1		1		1		1		-20.79028297340	140.07754044900
			Road_112	Barkly Highway	L3-126A-5	19			1		1		1		1		1		-20.79351170240	140.07347101700
			Road_113	Barkly Highway	202,103,021,602	9				1								1	-20.79399104740	140.07314759600
			Road_114	Barkly Highway	L3-124B-8	16			1		1		1		1		1		-20.80348176040	140.00116219500
			Road_115	Barkly Highway	L3-112-7	23			1		1		1		1		1		-20.78104461940	139.97309194800
			Road_116	Barkly Highway	L3-101-2	34			1		1		1		1		1		-20.75968038240	139.95103812600
			Road_117	Barkly Highway	202,103,021,676	12				1								1	-20.75903583740	139.95015828600
			Road_118	Barkly Highway	L3-98A-3	36			1		1		1		1		1		-20.75688011640	139.94678649400
			Road_119	Barkly Highway	L3-98-2	38			1		1		1		1		1		-20.75269654440	139.93064704500
			Road_120	Mount Frosty Road	202,103,244,473	17		1										1	-20.76193707640	139.92437963300
			Road_121	Mount Frosty Road	L3-97-1	52	1					2				1			-20.76184142040	139.92429713200
			Road_122	Mount Frosty Road	L3-96A-2	53	1					2				1			-20.76115139840	139.92373238800
			Road_123	Barkly Highway	L3-95A-3	31			1		1		1		1		1		-20.76152521540	139.90540295400
			Road_124	Barkly Highway	L3-93A-4	32			1		1		1		1		1		-20.76151159840	139.89559722000
			Road_125	Barkly Highway	L3-91-4	29			1		1		1		1		1		-20.76246959340	139.87796959700
			Road_126	Barkly Highway	L3-85-4	28			1		1		1		1		1		-20.76422375140	139.86290755100
			Road_127	Barkly Highway	L3-82-6	35			1		1		1		1		1		-20.75849936040	139.82807363500
			Road_128	East Leichardt Road	L3-77-5	49	1					2				1			-20.76664599040	139.79163996000
			Road_129	East Leichardt Road	L3-71-2	50	1					2				1			-20.76592961940	139.79029300400
			Road_130	East Leichardt Road	202,103,111,477	4		1										1	-20.76576467640	139.79004661900
			Road_131	East Leichardt Road	L3-68-3	54	1					2				1			-20.75907108140	139.78318683300
			Road_132	Barkly Highway	L3-63-6	50			1		1		1		1		1		-20.71561473540	139.71897652600
			Road_133	Barkly Highway	L3-35A-6	52			1		1		1		1		1		-20.70822450240	139.64252165600
			Road_134	Mica Creek Road	L3-9-8	45	1					2				1			-20.77792802940	139.49164296000
			Road_135	Powerhouse Road	L3-6-1	42	1				2				1		1		-20.78131009540	139.48821492700
			Road_136	Powerhouse Road	L3-9-7	44	1				2				1		1		-20.78023690440	139.48811854200
L4 / L5	Dajarra Road Substation	Selwyn & Phosphate Hill	Road_137	Cloncurry Duchess Road	L4-28-2	13			1		2		1		1		1		-20.85659982540	140.36021076900
			Road_138	Cloncurry Duchess Road	202,103,077,698	7				1								1	-20.85673793840	140.36004586000
			Road_139	Cloncurry Duchess Road	L4-35-6	9			1		2		1		1		1		-20.86742312440	140.35704688200
			Road_140	Cloncurry Duchess Road	L4-59-27	8			1		2		1		1		1		-20.87219126340	140.35569524300
			Road_141	Cloncurry Duchess Road	L4-80-21	1			1		2		1		1		1		-20.93636442640	140.33902384300
			Road_142	Malbon Selwyn Road	L4-86B-8	14	1					2				1			-21.16035875740	140.37726888900
			Road_143	Malbon Selwyn Road	L4-98-3	13	1					2				1			-21.16943197240	140.37874711200
			Road_144	Malbon Selwyn Road	202,103,219,924	13		1										1	-21.23408259140	140.42895344800
			Road_145	Malbon Selwyn Road	L4-122-7	10	1					2				1			-21.24728315540	140.44431476400
			Road_146	Malbon Selwyn Road	L4-152-3	9	1					2				1			-21.44502357740	140.50285642700
			Road_147	Malbon Selwyn Road	L4-162-4	8	1					2				1			-21.46995719340	140.49027116300
			Road_148	Malbon Selwyn Road	L4-165B-7	7	1					2				1			-21.50011800040	140.49050616000
			Road_149	Malbon Selwyn Road	L5-Gantry-6	6	1					2				1			-21.52997549840	140.48678891000
			Road_150	Malbon Selwyn Road	L5-6A-9	5	1					2				1			-21.53233937240	140.48547663200
			Road_151	Selwyn Chatsworth Road	L5-25-16	4	1					2				1			-21.57337503040	140.42180916000
			Road_152	Selwyn Chatsworth Road	L5-79-55	3	1					2				1			-21.63110399940	140.36022000000
			Road_153	Duchess Chatsworth Road	-	6		1										1	-21.73862058540	140.17960410400
			Road_154	Duchess Chatsworth Road	L5-79-14	1	1					2				1			-21.73864830840	140.17962614300
L7	Flinders Substation	Mount James Substation	Road_155	Flinders Highway	202,103,129,631	11				1								1	-20.84407850940	144.16348371200
			Road_156	Flinders Highway	L7-9-2	15			1		1		1		1		1		-20.84415676240	144.16337290800
			Road_157	Hughenden Riverside Road	202,103,172,556	7		1										1	-20.83782506640	144.16366715300
			Road_158	Hughenden Riverside Road	L7-10-2	29	1					2				1			-20.83818726140	144.16528231200
			Road_159	Hughenden Riverside Road	L7-12-3	28	1					2				1			-20.83864243040	144.16706773600
			Road_160	Hardwicke Street	L7-MJ_Gantry_RHS-7	27	1					2				1			-20.84041423940	144.19508428100
			Road_161	Little Avenue	L7-21-7	32	1					2				1			-20.83078601940	144.19469088000
			Road_162	Torver Valley Road	L7-23-3	43	1					2				1			-20.78031277040	144.20982266700
			Road_163	Torver Valley Road	L7-32-10	48	1					2				1			-20.76935746740	144.20621851600
			Road_164	Torver Valley Road	202,103,427,362	28		1										1	-20.70886371640	144.19846961600
			Road_165	Torver Valley Road	L7-38-2	63	1					2				1			-20.70868036440	144.19845610900
			Road_166	Torver Valley Road	L7-50-8	66	1					2				1			-20.68076312240	144.18623614900
			Road_167	Torver Valley Road	L7-57A-6	67	1					2				1			-20.67316988740	144.16407442500
			Road_168	Hann Highway	L7-MJ_Gantry_RHS-6	57			1		2				1		1		-20.19324661540	144.32823839100
						Total	***69***	***31***	***54***	***14***	***83***	***130***	***53***	***0***	***61***	***62***	***56***	***45***		
								No specific requirements		No specific requirements										

Towers	160 Towers
Substations	2 Substation
Flights	Nil
Accomodation	Ayr - Approx 50 local; Ravenswood (Nolans Village)
Batch Plants - Concrete	2 Fixed; 1 Mobile
Quarry Sites	6 Commercial Quarries
Borrow Pits	3 Localised
Construction Water (Surface)	11 Surface Locations
Construction Water (Bores)	7 Bore Locationsl
Access Tracks	71km (new); 18km (existing)
Waterway Crossings	68 (Barrier); 118 (MSES)
Rail Crossings Alignment	Nil
Rail Crossings Roads	1 Off
HV/Ergon Crossings	3 Off

Highway
Main Road
State Road
Private Road
Existing Track
New Track
Unused Tracks

Hytec Concrete
Flinders Hwy
Flinders Hwy
Waste
Ayr
Burdekin Concrete
79kms (62mins)
Turn Off Distances
Mulgrave Substation
Marock Quarry
MLS
MLS
Limit of Woodstock works
Tower L1-480
16kms
21kms
10kms
Woodstock Substation
Limit of Woodstock works
Woodstock Substation
16kms
13kms
Wier on Burdekin
Poor Condition
Towers Concrete (Mobile Plant)
Ravenswood

CPB CONTRACTORS UGL
CPB UGL Joint Venture

CONTRACTOR
CPB UGL Joint Venture
Level 6
199 Grey Street
South Brisbane
QLD 4101

CLIENT
Copperstring 2.0
Level 14
40 Creek Street
Brisbane
QLD 4000

ISSUE
16-04-2020

PROJECT
Copperstring 2.0

DRAWN BY
Ben Petrie

PROJECT NO.
Q1782-SKT-CPB-WA00-100003_0

CONSTRUCTION STAGING DIAGRAM WOODSTOCK HUB

Figure 4-5A Work Hubs and Proposed Access Tracks

Towers	130 Towers
Substations	Nil
Flights	Nil
Accomodation	150 Man Fly Camp
Batch Plants - Concrete	2 Fixed
Quarry Sites	2 Commercial Quarries
Borrow Pits	6 Localised
Construction Water (Surface)	10 Surface Locations
Construction Water (Bores)	Nil
Access Tracks	71km (new); 9km (existing)
Waterway Crossings	63 (Barrier); 118 (MSES)
Rail Crossings Alignment	Nil
Rail Crossings Roads	1 Off
HV/Ergon Crossings	3 Off

- Highway
- Main Road
- State Road
- Private Road
- Existing Track
- New Track
- Unused Tracks

Charters Towers
Flinders Hwy
Plum Tree Quarry
Hanson Concrete
Towers Concrete
Camp, Office, Laydown
CT1
CT2
CT3
CT4
Limit of Charters Towers works
Tower L1-351 (56mins)
Limit of Charters Towers
Tower L1-479 (37mins
20kms
40kms
Turn Off Distances

CPB QUGL CONTRACTORS

tiftOGUtktitfivi

CONTRACTOR
CPB UGL Jbrrt Venture
Levd fi
199 Grey Start
South Brisbane
QUD 4t01

CLIENT
Coppcntiing 2.0
Level 14
40 Creek Street
Brisbane
OLD 4000

ISSUE
04-06-2020

PROJECT
Copper-xmig 2.0

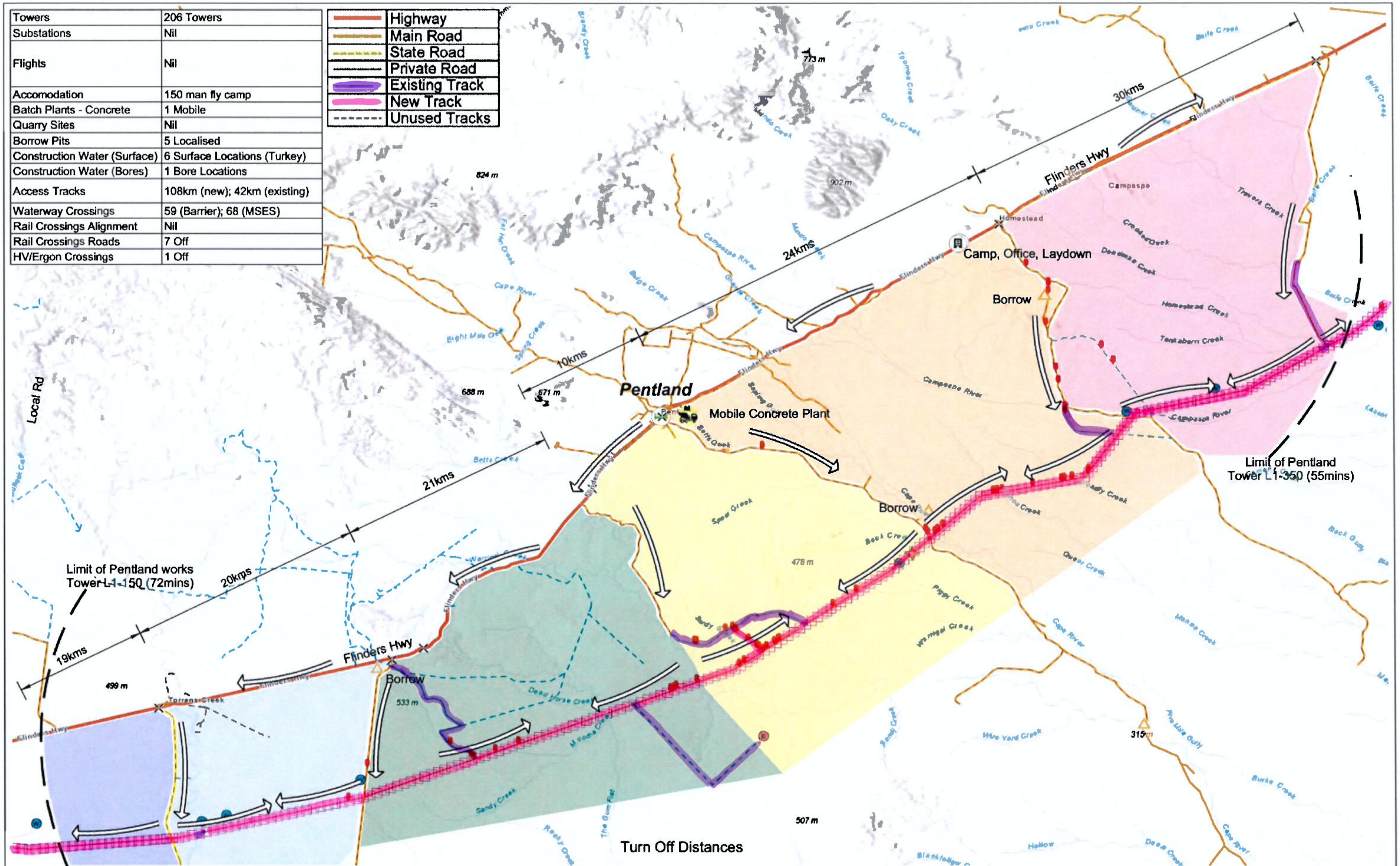
OURDir
Bon Petrie

PHUKCTNU
Q170&SKT-CPBJtVMO-100009_1

CONSTRUCTION STAGING DIAGRAM CHARTERS TOWERS HUB

Figure 4-5B Work Hubs and Proposed Access Tracks

Towers	206 Towers
Substations	Nil
Flights	Nil
Accomodation	150 man fly camp
Batch Plants - Concrete	1 Mobile
Quarry Sites	Nil
Borrow Pits	5 Localised
Construction Water (Surface)	6 Surface Locations (Turkey)
Construction Water (Bores)	1 Bore Locations
Access Tracks	108km (new); 42km (existing)
Waterway Crossings	59 (Barrier); 68 (MSES)
Rail Crossings Alignment	Nil
Rail Crossings Roads	7 Off
HV/Ergon Crossings	1 Off



CONTRACTOR
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CLIENT
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PROJECT
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CONSTRUCTION STAGING DIAGRAM PENTLAND HUB

Figure 4-5C Work Hubs and Proposed Access Tracks

Towers	410 Towers
Substations	2 Substations
Flights	34 Seats/Flight (hopper) Mon, Tues (1 Flight/Day)
Accomodation	47 Local / 300 man camp
Batch Plants - Concrete	1 Fixed (Wiben); 1 Mobile
Quarry Sites	1 Commercial Quarries
Borrow Pits	29 Localised
Construction Water (Surface)	7 Surface Locations (Turkey)
Construction Water (Bores)	6 Bore Locations
Access Tracks	214km (new); 69km (existing)
Waterway Crossings	33 (Barrier); 181 (MSES)
Rail Crossings Alignment	2 Off
Rail Crossings Roads	14 Off
HV/Ergon Crossings	17 Off

- Highway
- Main Road
- State Road
- Private Road
- Existing Track
- New Track
- Unused Tracks

Limit of Hughenden works
Tower L2-608 (46mins)

Limit of Hughenden works
Tower L1-149 (71mins)

Warwombie Quarry

Borrow

Borrow

Torver Valley

Hughenden

Flinders Substation

Wiben Concrete

HQ Camp, Office, Laydown

Waste

MLS

Walker Creek Ln

Monkel Rd

Hughenden Riverside Rd

Kennedy Development Rd

Glentor Prairie Rd

Cannonhill Rd

Existing Track

Hughenden Muttaburra Rd

Redcliffe Rd

Kennedy Energy Park Rd

Prairie Rd

Cotonvale Terrace Rd

Loddon Rd

Thornhill Tamworth Rd

HU1

HU2

HU3

HU4

HU5

HU6

HU7

HU8

HU9

HU10

10kms

16kms

9kms

23kms

6.5kms

16kms

15kms

13kms

12kms

12kms

14kms

20kms

26kms

12kms

CONTRACTOR CPB UGL Joint Venture Level 6 199 Grey Street South Brisbane QLD 4101	CLIENT Copperstring 2.0 Level 14 40 Creek Street Brisbane QLD 4000	ISSUE 04-05-2021 CREATED BY Ben Petrie	PROJECT Copperstring 2.0 PROJECT NO. Q1782-SKT-CPB-WA00-100007_1

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CONSTRUCTION STAGING DIAGRAM HUGHENDEN HUB

Figure 4-5D Work Hubs and Proposed Access Tracks

Towers	226 Towers
Substations	Nil
Flights	34 Seats/Right (hopper) Mon, Tues (1 Flight/Day)
Accomodation	150 man fty camp
Batch Plants - Concrete	1 Mobile
Quarry Sites	1 Commerical
Borrow Pits	9 Localised
Construction Water (Surface)	6 Surface Locations (Turkey)
Construction Water (Bores)	2 Bore Locations
Access Tracks	138km (new); 8.4km (existing)
Waterway Crossings	14 (Barrier); 114 (MSES)
Rail Crossings Alignment	Nil
Rail Crossings Roads	5 Off
HV/Emon Crossings	6 Off

- Highway
- Main Road
- State Road
- Pnvate Road
- Existing Track
- New Track
- Unused Tracks

Limit of Richmond works
Tower L2-383 (74mins)

Local Rd

RI7

Maxwell Ryuna Rd

Local Rd

RI6

Rinders Hwy

New Access Track

RI5

Richmond Winton Rd

RI4

Local Rd

Waste

Richmond

Camp, Office, Laydown

Ttobile Concrete

Borrow

Borrow

Borrow

Flinders Hwy

Limit of Richmond works
Tower L2-6G7 (47mins)

A Marock Quairy

RI3

Borrow

RI2

R11

21kms | 23kms | 15kms | 7.5kms | 28kms | 15kms | 7kms

Turn Off Distances

CPB CONTRACTORS aUGL
CPU UGL JoWVeNurt

CONTRACTOR
CPB UGL Joint Venture
Level 6
199 Grey Street
South Brisbane
QLD 4101

CUENT
Copperstring 2.0
Level 14
40 Creek Street
Brisbane
QLD 4000

issue
04-05-2021

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Copperstring 2.0

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Q1782-SKT-CPB-WA00-100006_1

CONSTRUCTION STAGING DIAGRAM RICHMOND HUB

Figure 4-5E Work Hubs and Proposed Access Tracks

Towers	232 Towers
Substations	Nil
Flights	34 Seats/Flight (hopper) Mon, Tues (1 Flight/Day)
Accomodation	150 man fly camp
Batch Plants - Concrete	1 Mobile
Quarry Sites	Nil
Borrow Pits	4 Localised
Construction Water (Surface)	3 Surface Locations
Construction Water (Bores)	2 Bore Locations
Access Tracks	132km (new); 17km (existing)
Waterway Crossings	56 (Barrier); 172 (MSES)
Rail Crossings Alignment	Nil
Rail Crossings Roads	5 Off
HV/Ergon Crossings	5 Off

Highway
Main Road
State Road
Private Road
Existing Track
New Track
Unused Tracks

Wills Developmental Rd
Eastern Creek Rd
Punchbowl Rd
Borrow
Borrow
Borrow
Camp, Office, Laydown
Concrete Mobile
Julia Creek
Waste
Flinders Hwy
Waste
Flinders Hwy
19kms
Ivellen Rd
McKinlay Gilliat Rd
Julia Creek Kynuna Rd
Yorkshire Road
Yorkshire Nelia Rd
Minamere Nelia Rd
JC7
JC6
JC5
JC4
JC3
JC2
JC1
Limit of Julia Creek works
Tower L2-154 (74mins)
Limit of Julia Creek works
Tower L2-382 (73mins)
15kms
17kms
25kms
5kms
5kms
43kms
6kms
23kms

Turn Off Distances

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CPB UGL Joint Venture

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CONSTRUCTION STAGING DIAGRAM JULIA CREEK HUB

Figure 4-5F Work Hubs and Proposed Access Tracks

Towers	323 Towers
Substations	1 Substation
Flights	74 Seats/Flight Mon, Tues (1 Flight/Day)
Accomodation	61 Local / 300 man camp
Batch Plants - Concrete	1 Fixed (Bell Rural Contr.)
Quarry Sites	2 Commercial Quarries
Borrow Pits	7 Localised
Construction Water (Surface)	7 Surface Locations
Construction Water (Bores)	19 Bore Locations
Access Tracks	138km (new); 195km (existing)
Waterway Crossings	54 (Barrier); 271 (MSES)
Rail Crossings Alignment	2 Off
Rail Crossings Roads	9 Off
HV/Ergon Crossings	11 Off

Highway
Main Road
State Road
Private Road
Existing Track
New Track
Unused Tracks

Limit of Cloncuury Works
Tower L3-113 (51mins)

Limit of Cloncuury Works
Tower L2-153 (73mins)

Limit of Cloncuury Works
Tower L4-80 (62mins)

Burke Development Rd
Ernest Henry Rd
Mindie Quarry
Corella Park Rd
Castlereagh Quarry
HQ Camp, Office, Laydown
Bell Rural Contracting
Dajarra Rd Substation
Barkly Hwy
Existing Track
MLS
Cloncurry
Flinders Hwy
Existing Track
Existing Track
Donindi McKinlay Rd
Landsborough Hwy
Cloncurry Duchess Rd
Existing Track
CL7
CL6
CL6
CL5
CL4
CL3
CL2
CL1
20kms
9kms

24kms | 20kms | 11kms | 17kms | 30kms | 18kms | 15kms

Turn Off Distances

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CONTRACTOR
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CONSTRUCTION STAGING DIAGRAM CLONCURRY HUB

Figure 4-5G Works Hubs and Proposed Access Tracks

Highway	
Main Road	
State Road	
Private Road	
Existing Track	
New Track	
Unused Tracks	

Towers	117 Towers
Substations	1 Substation
Flights	74 Seats/Flight M-F (2 Flights/Day) Sun (1 Flight/Day)
Accomodation	382 Local Accomdation
Batch Plants - Concrete	1 Fixed (QCrush)
Quarry Sites	6 Commercial Quarries
Borrow Pits	8 Localised
Construction Water (Surface)	4 Surface Locations
Construction Water (Bores)	9 Bore Locations
Access Tracks	53km (new); 72km (existing)
Waterway Crossings	20 (Barrier); 151 (MSES)
Rail Crossings Alignment	1 Off
Rail Crossings Roads	1 Off
HV/Ergon Crossings	5 Off

Barkly Highway
Moondarra Drive
Bluff Quarry
Moondarra Quarry
Lake Julius Rd
Borrow
Borrow
Borrow
Borrow
Limit of Mt Isa Works
Tower L3-112 (45mins)
Robin Quarry
Barkly Highway
Waste Facility
Mt Isa
MI6
QCrush
Ergon Track
Mt Isa Substation
NLS
Ergon Track
Ergon Track
Ergon Track
Existing Track
East Leichart Rd
MI5
MI4
MI3
MI2
MI1
Impass
(Roads not linked over ridgeline)
17kms
8kms
6.5kms
7kms
12kms
Turn Off Distances

CPB CONTRACTORS UGL
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CONTRACTOR
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Level 6
199 Grey Street
South Brisbane
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CLIENT
Copperstring 2.0
Level 14
40 Creek Street
Brisbane
QLD 4000

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04-05-2021

PROJECT
Copperstring 2.0

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Ben Petrie

PROJECT NO.
Q1782-SKT-CPB-WA00-100002_0

CONSTRUCTION STAGING DIAGRAM MT ISA HUB

Figure 4-5 H Work Hubs and Proposed Access Tracks

Towers	212 Towers
Substations	2 Substations
Flights	Mt Isa (Bus to Selwyn) Charter to Osbourbe (+Bus)
Accomodation	150 Man Fly Camp + Options
Batch Plants - Concrete	1 Mobile (Selwyn)
Quarry Sites	Nil
Borrow Pits	23 Localised
Construction Water (Surface)	Nil
Construction Water (Bores)	4 Bore Locations
Access Tracks	119km (new); 24km (existing)
Waterway Crossings	32 (Barrier); 191 (MSES)
Rail Crossings Alignment	1 Off
Rail Crossings Roads	5 Off
HV/Ergon Crossings	1 Off

Highway
Main Road
State Road
Private Road
Existing Track
New Track
Unused Tracks

Limit of Selwyn Works
Tower L4-81 (65mins)

Malbon Selwyn Rd

SE1

SE2

SE3

SE4

SE5

22kms

Malbon Selwyn Rd

Borrow

Borrow

Borrow

Selwyn

MLS

450 m

Proposed Chinova or Fly Camp

18kms

Selwyn Chatsworth Rd

Borrow

Selwyn Toolebuc Rd

Borrow

Borrow

Borrow

Borrow

Selwyn Chatsworth Rd

32kms

Turn Off distances

Selwyn Phosphate Rd

22kms

Selwyn

Phosphate Hill Mine Camp

ELS

Woodya

Limit of Selwyn Works
Woodya Substation (99mins x-selwyn)

Osbourne Mine Camp

Duchess Phosphate Hill Rd

Duchess Chatsworth Rd

Malbon River
Florence Creek
Sandy Creek
Clancurry River
Horse Creek
Boomerang Creek
Green Creek
Bungle Creek
Limestone Creek
Yellow Waterhole
Burke River
Monastery Creek
Woodya Creek
Koler Creek
Gin Creek
Big Mick Creek
Sandy Creek

454 m
472 m
356 m
450 m
370 m
321 m
313 m
320 m

CPB CONTRACTORS UGL
CPB UGL Joint Venture

CONTRACTOR	CLIENT	ISSUE	PROJECT
CPB UGL JV Level 6 199 Grey Street South Brisbane QLD 4101	Copperstring 2.0 Level 14 40 Creek Street Brisbane QLD 4000	04-05-2020 DRAWN BY Ben Petrie	Copperstring 2.0 PROJECT NO. Q1782-SKT-CPB-WA00-100004_1

CONSTRUCTION STAGING DIAGRAM SELWYN HUB

Figure 4-5l

4.2 Additional information land

4.2.1 Revised property impacts register

An updated list of impacted properties is provided in Table 4-2. It lists impacted property owners by CopperString Property Identification number, impacted lots and plans for each property identification number, area of land and length of easement for each property identification number. Eight parcels of land have been removed from the impacted land parcels since the draft EIS was published. Two additional parcels of land have been added to the impacted land parcels. No new stakeholders are impacted.

Lot 232 SP249226 (CU7 L065) is associated with the Hughenden-Winton railway line (Winton branch line) located south west of Hughenden. This branch line closed in 2008. The landholder for this parcel (Queensland Rail) is not a newly impacted stakeholder as other parcels south of Hughenden, Cloncurry and Mt Isa are also impacted by the corridor selection.

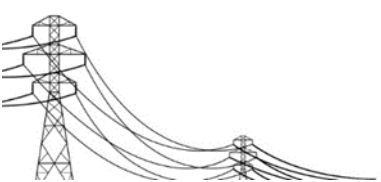
Lot 1 MPH20454 (CU3 F011) is associated with the Mt Leyshon Mining lease, located south of Charters Towers. The landholder for this parcel (Newmont Australia) is not a newly impacted stakeholder as other parcels associated with this property are also impacted by the corridor selection.

124 land parcels are now impacted by the CopperString transmission line and substations. No new stakeholders are impacted since the draft EIS was published.

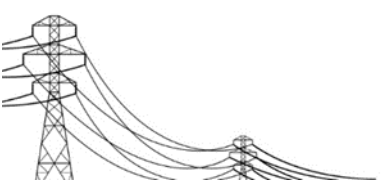
Table 4-2 Property Impacts Register

CuString Property ID	Lot on Plan	Corridor Area (ha)	Corridor Length (km)
CU2 L001	Lot 4 Survey Plan 289516	122.76	10.25
CU3 L002	Lot 4132 Survey Plan 282319	116.30	9.71
CU3 L003	Lot 4026 Survey Plan 112067 Lot 4548 Crown Plan PH2196 Lot 4577 Survey Plan 282304	197.69	17.38
CU3 L004	Lot 35 Crown Plan AP13540 Lot 386 Crown Plan AP2788 Lot 4004 Survey Plan 242524	115.37	9.63
CU3 L005	Lot 3941 Survey Plan 256887	40.85	3.41
CU3 L006	Lot 4924 Survey Plan 308339	41.3	3.45
CU3 L007	Lot 511 Crown Plan PH459	96.02	8.01
CU3 L009	Lot 3 Crown Plan DV686 Lot 4404 Crown Plan PH857 Lot 2461 Crown Plan PH293	174.87	14.6
CU3 F010	Lot 1 Crown Plan MPH13914 Lot 2 Crown Plan DV68	69.64	5.84
CU3 F011	Lot 10 Survey Plan 258128 Lot 5260 Survey Plan 269241 Lot 1 MPH20454	204.16	17.03
CU3 L012	Lot 300 Survey Plan 137135	10.67	0.890
CU3 F013	Lot 3 Survey Plan 137134 Lot 2 Crown Plan DV82	52.97	4.42
CU3 L014	Lot 2 on Crown Plan SP314321	66.76	5.57
CU3 L015	Lot 4 Crown Plan DV463	237.72	19.82
CU3 L016	Lot 3 Crown Plan GF70	65.67	5.48
CU3 F017	Lot 1 Crown Plan GF48 Lot 4 Crown Plan GF48	100.87	8.41
CU3 L017A	Lot 2 on Crown Plan GF62	50.66	4.22

CuString Property ID	Lot on Plan	Corridor Area (ha)	Corridor Length (km)
CU3 L018	Lot 61 Crown Plan GF812272	217.54	18.13
CU3 L019	Lot 28 Crown Plan GF154 Lot 2072 Survey Plan 182333	535.76	44.64
CU4 L020	Lot 25 Crown Plan OL212 Lot 4 Survey Plan 118964 Lot 6 Survey Plan 118964	321.59	26.74
CU4 F021	Lot 3 Crown Plan WOU23	124.93	10.44
CU4 F022	Lot 2 Crown Plan WOU23	71.01	5.91
CU4 L023	Lot 2 Crown Plan WOU87	79.09	6.58
CU4 F024	Lot 3 Survey Plan 144360	77.56	6.45
CU4 F025	Lot 3 Crown Plan W573 Lot 1 Crown Plan WOU7	136.16	11.33
CU4 L026	Lot 3 Crown Plan WOU16	97.96	8.15
CU4 F027	Lot 1 Crown Plan DG34	120.3	10.02
CU4 F028	Lot 4 Crown Plan DG240 Lot 4 Crown Plan DG48	174.57	14.52
CU4 F094	Lot 1 Crown Plan DG35 Lot 2 Crown Plan DG35	72.71	7.13
CU4 L030	Lot 14 Crown Plan D15766 Lot 16 Crown Plan D15766	65.09	5.42
CU4 L031	Lot 3 Crown Plan D15768	49.06	4.08
CU4 F032	Lot 21 Crown Plan DG161 Lot 4 Crown Plan DG64	224.16	18.63
CU4 L033	Lot 8 Crown Plan DG256	93.74	7.8
CU4 L034	Lot 4 Crown Plan DG173	101.2	8.42
CU4 L035	Lot 13 Crown Plan DG158 Lot 7 Crown Plan RM59	253.75	21.11
CU4 F036	Lot 5 Crown Plan RM63 Lot 12 Crown Plan RM37	197.4	16.43
CU5 L037	Lot 2 Crown Plan RM66	77.35	6.44
CU5 L038	Lot 1 Crown Plan RM67	97.34	8.1
CU5 L039	Lot 3 Crown Plan B15795 Lot 4 Crown Plan B15795	143.41	11.94
CU5 L040	Lot 2 Crown Plan RT113	67.79	5.64
CU5 L041	Lot 1 Crown Plan RT129	50.07	4.17
CU5 F042A	Lot 3 Crown Plan RT35	79.63	6.63
CU5 F042B	Lot 52 Crown Plan RT103	32.85	2.74
CU5 L043	Lot 4 Crown Plan RT37 Lot 7 Crown Plan RT60	173.78	14.47
CU5 L044	Lot 12 Crown Plan RT64	133.58	11.13
CU5 L045	Lot 4 Crown Plan RT59	83.82	6.98
CU5 L046	Lot 7 Crown Plan B157101	105.85	8.82
CU5 L047	Lot 3 Crown Plan B157101 Lot 10 Crown Plan B157101	247.24	20.61
CU6 L048	Lot 3 Crown Plan B157123	32.63	2.72
CU6 L049	Lot 2 Crown Plan EN13 Lot 2 Crown Plan EN25	167.54	13.97
CU6 L050	Lot 4 Crown Plan EN25	69.01	5.76



CuString Property ID	Lot on Plan	Corridor Area (ha)	Corridor Length (km)
CU6 L051	Lot 1 Crown Plan EN3 Lot 2 Crown Plan EN3	182.99	15.27
CU6 L052	Lot 3 Crown Plan EN3 Lot 4 Crown Plan EN18 Lot 3 Crown Plan EN26 Lot 2 Crown Plan EN66 Lot 1 Crown Plan EN26 Lot 6 Crown Plan EN47 Lot 5 Crown Plan EN47	322.2	26.89
CU6 L053	Lot 3 Crown Plan EN16	84.84	7.08
CU6 F054	Lot 7 Crown Plan B157137	36.92	3.08
CU6 F055	Lot 4 on SP299868 Lot 3 Crown Plan EN51	170.85	14.26
CU6 L056	Lot 6 Crown Plan EN65	95.3	7.96
CU6 L057	Lot 1 Crown Plan EN59	84.59	7.06
CU6 F058	Lot 1 Crown Plan BD52	177.75	14.84
CU6 F059	Lot 1 Crown Plan BD2	159.36	13.31
CU7 L060	Lot 1 Survey Plan 280691	75.59	6.32
CU7 L061	Lot 2 Crown Plan BD152	150.21	12.57
CU7 L062	Lot 4 Crown Plan 884304 Lot 4910 Survey Plan 135396	95.61	7.99
CU7 L063	Lot 2 Crown Plan SW40 Lot 2463 Crown Plan PH760 Lot 4893 Survey Plan 259551	211.67	30.06
CU7 L064	Lot 3111 Survey Plan 272586	62.18	5.2
CU7 L065	Lot 232 Survey Plan 249226 Lot 23 Survey Plan 136472 Lot 281 Survey Plan 130190	3.1	0.345
CU7 L067	Lot 427 Crown Plan SW805054	191.39	31.95
CU7 L068	Lot 69 Survey Plan 223507	88.73	14.85
CU7 L069	Lot 5 Crown Plan SW43 Lot 7 Crown Plan SW42	59.01	9.85
CU7 L072	Lot 13 Survey Plan 223510	438.06	73.17
CU7 L074	Lot 1 Survey Plan 150176	4.7	0.785
CU7 L075	Lot 417 Crown Plan 855213 Lot 521 Crown Plan 905413	206.82	30.01
CU7 L076	Lot 220 Survey Plan 177588	102.86	17.22
CU7 L077	Lot 573 Survey Plan 110102 Lot 922 Survey Plan 137139 Lot 101 Survey Plan 248023	330.2	55.23
CU8 F079	Lot 3 Survey Plan 222005	4.66	778
CU8 L080	Lot 41 Crown Plan AP15672 Lot 10 Survey Plan 293841 Lot 1 Crown Plan AP15586 Lot 8 on Crown Plan USL621 Lot 422 on Survey Plan 128401 (Mt Isa Substation)	0.37 0.23 4.05 5.07 n/a	0.031 0.023 0.676 0.846 n/a
CU4 F104	Lot 2 on Crown Plan GS933	34.56	2.88
CU4 F105	Lot 71 on SP289517	62.56	5.22

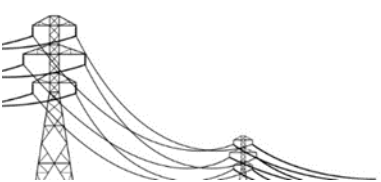


4.2.2 Revised road crossing register

Table 4-3 provides a revised road crossing register. No infrastructure is planned to be built on the state-controlled road network or the local controlled road network.

Table 4-3 Road Crossing Register

Road Name (Project Ref)	Chainage of Crossing
State controlled roads	
Ayr Ravenswood Road (Road _03)	7.5WD
Burdekin Falls Dam Road (Road_05)	38.9WD
Gregory Developmental Road (Road _29)	110.3WD
Aramac Torrens Creek Road (Road_44)	249.6WD
Hughenden Muttaburra Road (Road_52)	337.9WD
Kennedy Development Road (Road_54)	341.0WD
Richmond Winton Road (Road_64)	458.3WD
Julia Creek Kynuna Road (Road_77)	598.1WD
Landsborough Highway (Road_89)	710.7WD
Cloncurry Duchess Road (Road_101)	737.5WD
Barkly Highway (Road_113)	35.1DM
Barkly Highway (Road_117)	49.2DM
Cloncurry Duchess Road (Road_138)	13.4DS
Total	**13**
Local government roads	
Silver Valley Road (Road_09)	41.5WD
Silver Valley Road (Road_10)	46.0WD
Track – No Name (Road_12)	55.5WD
Lornesleigh Road (Road_18)	74.2WD
Cameron Downs Road (Road_19)	76.7WD
Bluff Road (Road_24)	92.0WD
Mountain View Road (Road_25)	95.7WD
Mount Leyshon Road (Road_27)	101.0WD
Trafalgar Road (Road_ 31)	120.1WD
Helenslee Road (Road_36)	162.9WD
Longton Road (Road_38)	181.8WD
Lyons Creek Road (Road_42)	233.7WD
Cotonvale Penrice Road (Road_46)	278.0WD
Prairie Muttaburra Road (Road_48)	297.5WD
Redcliffe Road (Road_49)	329.8WD
Thornhill Tamworth Road (Road_57)	386.9WD
Marathon Stamford Road (Road_59)	405.7WD
Barabon Terranburby Road (Road_61)	420.1WD
Maxwelton Kynuna Road (Road_68)	498.9WD
Minamere Nelia Road (Road_70)	545.1WD
Proa Road (Road_72)	545.1WD
Yorkshire Neilia Road (Road_74)	565.7WD
Yorkshire Road (Road_75)	581.2WD
McKinlay Gilliat Road (Road_79)	625.3WD



Road Name (Project Ref)	Chainage of Crossing
Ivellen Road (Road_80)	639.6WD
Oorindi Mckinlay Road (Road_82)	670.0WD
Round Oak Round (Road_93)	723.1WD
Roxmere Road (Road_96)	727.0WD
Mount Frosty Road (Road_120)	51.9DM
East Leichardt Road (Road_133)	66.1DM
Mt Isa Duchess Road Selwyn Road (Road_144)	96.8DM
Mica Creek Road (Road_134)	97.3DM
Malbon Selwyn Road (Road_144)	56.7DS
Duchess Chatsworth Road (Road_153)	37.0SW
Chatsworth Phosphate Road (Road_154)	44.5SW
Total	**35**
Private road	
Not counted but expected to be 100	N/A

4.2.3 Revised infrastructure crossing register

Table 4-4, Table 4-5 and Table 4-6 provide an updated description of other infrastructure crossings.

Table 4-4 Rail Crossing Register

Railway crossing	Status	Chainage
Ravenswood Branch (Mingela to Ravenswood) (Rail_03)	No active rail	32.2WD
Winton Branch (Hughenden to Winton) (Rail_28)	No active rail	341.8WD
Mount Isa Line (Cloncurry to Mount Isa) (Rail_50)	Active rail	97.3MD
Mount Isa Line (Cloncurry to Mount Isa) (Rail_52)	Active rail	733.4WD
Mount Isa Line (Cloncurry to Mount Isa) (Rail_53)	Active rail	14.3DS
Selwyn Branch (Malbon to Selwyn) (Rail_57)	No active rail	72.1DS
	Total	**6**

Table 4-5 Ergon Infrastructure Crossing Register

Project Section	Crossing kV	Number
Renewables Energy Hub	8 x 19.100kV 1 x 33.000kV 4 x 66.000kV	13
CopperString Core	16 x 19.100kV 2 x 33.000kV	18
Dajarra Road Connection for connection to the Ernest Henry and Chumvale Substation	1 x 66.000kV 1 x 220.000kV	2
Dajarra Road Connection for the connection to the Dugald River	1 x 66.000kV 1 x 220.000kV	2
Mount Isa Augmentation	2 x 11.000kV 1 x 19.100kV 2 x 66.000kV 3 x 220.000kV	8
Southern Connection and Woodya	3 x 19.100kV	3
	Total	**46**

Table 4-6 Gas Pipeline Crossing Register

Gas pipeline crossings	Number
No crossings (following removal of Cannington Connection)	0
Total	**0**

4.3 Additional information MNES

Matters of National Environmental Significance

– Provide a revised Chapter 18 – Matters of National Environmental Significance (MNES) including a reference to consultation undertaken with Department of Agriculture, Water and Energy (DAWE) representatives

The assessment of impacts for the Supplement to the EIS (SEIS) has included minor changes to the position of the transmission corridor selection (all located well within the 2.5km study area), configuration of substation construction areas, temporary workers camps and construction laydown areas, construction access requirements and infrastructure design optimisation. Consequently, this has resulted in changes to the project activities and potential impacts to conservation significant flora and fauna. A detailed assessment of these changes has been including in the Revised MNES Report provided in Volume 4 Attachment E.

The revision of the MNES Report has considered consultation with DAWE which was undertaken through three separate meetings following the completion of the draft EIS. The meetings targeted survey effort, habitat mapping methodology, expected disturbance footprints and the development of species impact assessment tables. Engagement with DAWE will be ongoing throughout the EIS approval process.

A comparison between the Draft EIS and SEIS of mapped habitat intersected by the project area land requirements found that the habitat intersected was generally consistent but overall reduced by approximately 3% for the SEIS. Table 4-7 displays the change in project activities between the draft EIS and the supplement to the EIS.

Table 4-7 Species habitat mapped within project area

Species	Total mapped habitat intersected by the Project activities (ha)	Updated mapped habitat intersected by the Project activities (ha)	Difference (%)
Flora			
Acacia armitii	8.06	8.06	0%
Acacia crombiei	660.08	658.60	-0.22%
Eucalyptus nudicaulis	141.85	132.23	-6.78%
Eucalyptus raveretiana	7.23	7.27	0.55%
Livistona lanuginosa	57.80	57.78	-0.03%
Fauna			
Australian painted snipe	884.26	816.42	-7.67%
Black-throated finch	1711.48	1776.55 (total)	0.27%
		214.93 (seasonal breeding)	
		203.42 (permanent breeding)	
		1776.55 (foraging)	
Common death adder	2083.28	2065.35	-0.86%
Grey falcon	1215.18	1210.20	-0.41%
Julia Creek dunnart	867.36	859.42	-0.92%
Koala	700.39*	1097.55 (total)	36.19%
		116.89 (high)	

Species	Total mapped habitat intersected by the Project activities (ha)	Updated mapped habitat intersected by the Project activities (ha)	Difference (%)
		313.66 (moderate)	
		667.00 (low)	
Migratory birds	244.54	208.95 (total)	-14.55%
		208.95 (breeding)	
		208.95 (non-breeding)	
Northern leaf-nosed bat	311.59	309.58	-0.65%
Night parrot	627.74 (nesting and feeding habitat)	970.89 (total)	35.34%
		44.22 (breeding)	
		926.67 (foraging)	
Ornamental snake	248.58	248.06	-0.21%
Painted honeyeater	5646.19	5227.13	-7.42%
Plains death adder	2069.2	2027.70	-2.01%
Purple-necked rock wallaby	2118.49	1765.35	-16.67%
Red goshawk	398.99	379.87	-4.79%
Short-beaked echidna	6274.78	5865.38	-6.52%
Squatter pigeon (southern)	38.23 (breeding)	38.43 (breeding)	0.52%
	148.19 (foraging)	148.97 (foraging)	0.52%
Vine thicket fine-lined slider	0	0	0%
White throated Needletail #		637.00	

*Underestimated due to discrepancies within data

Calculations for this species included to ensure impacts assessed for all Project activities, even though this species is likely to only overfly the Project.

There are some variations in mapped habitat between the draft EIS and the SEIS. Koala habitat mapping discrepancies affected calculations within the draft EIS leading to an increase in intersected habitat in the SEIS. Potential habitat for the night parrot has also increased based on an additional desktop review completed by members associated with the night parrot recovery team. The removal of the Cannington line from the Project reduced the mapped habitat for several species, notably those with very broad distributions including the painted honeyeater and the short beaked echidna. Overall, changes in mapped habitat intersecting the Project are limited.

Subsequent to the draft EIS, the concept design includes the projects construction activities and design footprints, and these form the basis of the impact assessment. The concept design also contains information provided by the ECI (Early Contractor Involvement) Joint Venture. The current concept design tower spacing has significantly reduced the total number of towers along segments. In addition, the area required for brake and winch sites has also reduced. However, these reductions have been offset by an increase in the area required for tower assembly and line of sight.

Matters of National Environmental Significance

– implications of all updated assessment material for predicted impacts on MNES, including quantification of impact areas

The final area of habitat intersected and impacted by the Project depends on the configuration of components including conductor size, tower structure type, the height and size of towers and these will not be confirmed until detailed design has been completed. The draft EIS mapped species habitat against an area based on an assumed ratio of vegetation/habitat disturbance. Impacts for the concept design have been quantified through a GIS platform providing a greater level of confidence in impact calculation. A comparison of the draft EIS and SEIS for species habitat within Project activities is shown in Table 4-8.

Table 4-8 Species habitat within Project activities compared between the Draft EIS and the SEIS

Species	Draft EIS total habitat within Project activities (ha)*	SEIS total habitat within Project activities (ha)**	
		Non-residual	Residual
Flora			
Eucalyptus raveretiana	0.002	3.38 (total impact)	
		1.96	1.42
Livistona lanuginosa	2.18	29.88 (total impact)	
		16.13	13.75
Acacia crombiei	105.46	261.97 (total impact)	
		185.95	76.02
Fauna			
Squatter pigeon (southern)	37.80	75.61 (total impact)	
		75.05	0.56
Koala	97.04	681.38 (total impact)	
		592.56	88.82
Black-throated finch	290.99	833.95 (total impact)	
		693.88	140.07
Julia Creek dunnart	107.22	300.94 (total impact)	
		299.01	1.93
Red goshawk	88.87	188.65 (total impact)	
		106.67	81.99
Night parrot	62.57	371.53 (total impact)	
		242.49	129.04
Painted honeyeater	661.09	1985.31 (total impact)	
		1904.86	80.45
Australian painted-snipe	138.63	284.51 (total impact)	
		115.42	169.09
Ornamental snake	34.66	111.00 (total impact)	
		110.18	0.81
Grey falcon	216.20	529.88 (total impact)	
		373.03	156.85
Plains death adder	261.47	746.05 (total impact)	
		711.13	34.92
Migratory birds	65.15	111.11 (total impact)	
		72.51	38.60

*Project Activities is equivalent to the construction footprint for Draft EIS

** SEIS Project Activities is equivalent to the construction footprint for temporary and permanent activities including camps, laydowns, brake and winch, CEV huts, substations, transmission towers and access tracks

An increase in confidence through the incorporation of the concept design has guided improvements to calculations of non-residual and residual impacts to conservation significant species. As shown in Table 4-8, all species have seen increases in overall combined (non-residual and residual) impacts. In most instances, the non-residual impacts are larger than residual impacts and this is associated with specific project activities. The evaluations of these impacts within the Significant Impact Assessment (SIA) for conservation significant species determined that the residual impacts resulting from the project will only be significant for koala, black throated finch and squatter pigeon. A summary of impacts for these three species are detailed in Table 4-9

Table 4-9 Summary of significant residual impacts by species

Protected matter	Total area of mapped habitat intersected by the project activities *(ha)	Residual Impact area (ha)	Significant Residual Impact area (ha)
Squatter pigeon (Southern)	187.40 (total)	0.56 (total)	0.56 (total)
	38.43 (breeding)	0.00	0.00
	148.97 (foraging)	0.56	0.56 (open forest, open woodlands)
Koala	1097.56 (total)	88.82 (total)	14.32(total)
	116.89 (high)	39.40	10.63 (riparian)
	313.66 (moderate)	20.28	3.69 (open forest, open woodlands)
	667.01 (low)	27.81	0.00
Black-throated finch	1776.55 (total)	140.07 (total)	52.81 (total) (open forest, open woodlands)
	214.93 (seasonal breeding)	38.88	11.38 (open forest, open woodlands)
	203.42 (permanent breeding)	59.21	41.43 (open forest, open woodlands)
	1776.55 (foraging)	41.98	0.00

*Footprint is equivalent to the Construction Footprint for Laydowns and CEV Huts, Easement, Land Acquisition and Adjusted Substation Footprints

An updated assessment of the predicted impacts on MNES, including the quantification of impact areas is detailed in Attachment E – Revised MNES and MSES report. The report includes an assessment of the inclusion of a detailed concept design pertaining to impacts on conservation significant species within the Project activities.

Matters of National Environmental Significance

- clear information regarding species occurrence, the total suitable habitat within a clearly defined project activities and a detailed description of how this additional information was collected and refined since the draft EIS

The Revised MNES Report provided in Volume 4 Attachment E details additional survey effort (Section 18.3.6), the mapping of suitable potential habitat (Section 18.3.8) and how the assessment of impacts was refined post Draft EIS (Section 18.3.9).

Matters of National Environmental Significance

- additional information on the potential impact/s to the fauna species specifically identified in DAWE's submission. For any species where no significant impact is predicted, provide detailed justification of this position

DAWE's review and subsequent submission on the Draft EIS highlights required examining impacts for several fauna species: Carpentarian Grasswren (*Amytornis dorotheae*), Gouldian Finch (*Erythrura gouldiae*) and the Eastern Star Finch (*Neochmia ruficauda ruficauda*). The impact assessment within the Draft EIS targeted those species confirmed present or likely to occur. A thorough desktop and field assessment of the three species was undertaken to identify if these species are likely to occur along the proposed alignment. For these species, on-ground habitat survey data coupled with an extensive literature review concluded that the Carpentarian Grasswren and Gouldian Finch may occur, and the Eastern Star Finch is still unlikely to occur as per the Draft EIS. These outcomes therefore do not warrant impacts considered based on their likelihood of occurrence. Section 18.4.10.4 of the revised MNES report details the review of these species.

Matters of National Environmental Significance

- clear information on how mapped suitable MNES habitat within the project area has been refined based on desktop analysis and ground-truthing surveys

Following the submission of the Draft EIS, additional on-ground surveys have been completed to further refine species habitat mapping through vegetation and species-specific habitat assessments. Section 18.3.6 of the revised MNES report highlights the additional survey effort including a total of 687 survey assessments divided into an additional 322 vegetation assessments, 295 species habitat assessments and 70 rapid aquatic assessments. Surveys were completed pre and post wet season, and in the case of the black throated finch (*Poephila cincta cincta),* allowed for a refined habitat delineation of this species. In addition, consultation with the night parrot specialists (Adaptive NRM 2021) has enabled the development of refined night parrot (*Pezoporus occidentalis*) roosting and foraging habitat.

Matters of National Environmental Significance

- amendments of the estimated permanent clearing loss to be consistent with DAWE's requirements for MNES

The Revised MNES Report provided in Volume 4 Attachment E details residual and non-residual impacts associated with Project activities. Residual impacts are considered to result in a permanent change to potential habitat. This varied for different project activities within different landscape contexts but included activities such as access tracks, tower pads and structure, substation and CEV huts. These are detailed in Section 18.5 Potential Impacts and Mitigation.

Matters of National Environmental Significance

- ensure the number of MNES species considered are consistent throughout the document.

Thirty fauna species listed under the EPBC Act that have been historically recorded or may have suitable habitat present within the desktop search extent have been considered within the revised MNES report provided in Volume 4, Attachment E. It should be noted that across field surveys of the Project area, BAAM, GHD and Base Consulting confirmed four listed threatened fauna species as

present, with an additional eight listed threatened fauna species considered likely to occur within the project area. Ten species had a reduced likelihood of occurrence but may occur due to the presence of marginal habitat. The remaining thirteen species identified within all desktop assessments are considered unlikely to occur Overall, this totals 35 species, however, includes several species as unlikely to occur noted by BAAM in 2010 but not noted by GHD in 2019/2020. Similarly, GHD in 2019/2020 noted species which were not noted by BAAM in 2010.

Matters of National Environmental Significance

- Provide a draft offset strategy to address DAWE submission, incorporating updated information on predicted MNES impacts.

The significant impact assessments undertaken in Volume 4 Attachment E, identified residual and non- residual impacts to conservation significant species and determined that the residual impacts resulting from the Project will be significant residual impacts to koala, black throated finch and squatter pigeon. The proposed infrastructure may result in a loss of species connectivity or affect future habitat mapping (based on remnant ecological landscape zones and characteristics such as RE's). Avoidance and mitigation strategies implemented during the design and sighting of towers and methodologies and management measures applied during construction aim to avoid, minimise and mitigate loss of foraging or breeding habitats over the medium to long term. Therefore, significant residual impacts are limited.

The final quantum of significant residuals impacts to MNES has been quantified, however offsetting of these impacts has yet to be finalised and agreed with by DAWE. Since the Draft EIS was completed further consultation with DAWE has indicated that any residual impacts or loss of some conservation significant species habitat, regardless of the dimension, size or scale, will result in a significant impact to the species, due to their conservation status. The Revised MNES Report indicates that there is potential significant residual impacts to the koala, black-throated finch and squatter pigeon that would require offsets. To assist in this process and demonstrate the capability to meet an offset obligation, a Draft Biodiversity Offset Management Strategy has been prepared and provided in Volume 4 Attachment G.

4.4 Additional information MSES

Matters of State Environmental Significance

- Provide an update on consultation with the landholder who is a party to the conservation agreement for the Ballara Nature Refuge. Identify potential opportunities proposed to address impacts to this area (e.g. Land Restoration Fund, revegetation initiatives).

The corridor selection through the Ballara Nature Refuge has been developed in close consultation with the landholder who has signed an options agreement for the Grant of Easement with CuString Pty Ltd regarding CopperString 2.0. An assessment of alternative southern connections from Cloncurry, through the eastern portion of the Ballara Nature Reserve and onto Selwyn was included as part of the Draft EIS Volume 3 Appendix D Project Corridor Selection Report. The alignment has been flown by the landowners and in their view the proposed alignment is in the best location possible to avoid impacts to their land, the environmental values recognised within the Conservation Agreement to Establish Ballara Nature Refuge and its existing grazing use.

Consultation between the landholder and DES regarding the Ballara Nature Refuge has been ongoing. We understand that the landholder has reached an agreement with DES to amend the Conservation Agreement to exclude or revocate the proposed transmission line corridor selection / easement area to allow the project to be constructed and operated on their land. We understand

that any amendments to the Conservation Agreement to Establish Ballara Nature Refuge must be agreed by both parties and consented to by the Minister. In excluding the corridor selection, DES have advised the landholder that an offset area may be required as a replacement to the excluded portions of the nature refuge. Attachment G – Draft Biodiversity Offset Management Strategy has identified several locations which provide a range of ecological values encompassing requirements for potential impacts along the alignment and is likely to incorporate offset requirements for the Ballara Nature Refuge.

Matters of State Environmental Significance

- Provide updated details (including maps, plans, digital data) of the location and extent of proposed vegetation clearing, including:
  - temporary and permanent assessable clearing footprints
  - temporary and permanent clearing for access tracks.
- For any digital data provided, include references in the attribute table to indicate characteristics relevant to the assessment of vegetation clearing applications to satisfy performance outcomes of State Development Assessment Provisions – State Code 16 as identified in the Department of Resources submission.

The projects construction activities and design footprints, which are the basis of the impact assessment, have also been revised since the Draft EIS by the ECI JV. However, the final configuration of components including conductor size, tower structure type, the height and size of towers will not be confirmed until the detailed design has been completed. Key engineering optimisations and innovations currently being reviewed involve conductor size, tower type and foundations. The use of a different conductor could further increase the distance between towers to between 600m-650m, resulting in less towers but increasing the amount of steel required particularly for strain towers at bends. Tower types under consideration include guyed (monopoles) as an alternative to the industry standard self-supporting lattice towers which may reduce the appearance and final infrastructure footprint. Alternative tower designs will have a different foundation design. Alternative forms of tower foundation, currently proposed as cast in-situ concrete, are also being considered, including driven concrete piles, driven steel piles and screwed steel piles. The optimisation of these design elements will continue and change the final number, size and height of towers.

Considering, the current concept design has less towers than the initial concept design developed for the draft EIS, and the final design has the potential to be further optimised and developed within a smaller development footprint; the quantification of impacts at the SEIS stage are considered suitable to reliably predict expected impacts to conservation significant species and potential habitat.

An output from the impact assessment process has been to annotate specific design recommendations on Vegetation Clearing Works plans provided in Volume 4 Attachment F. These recommendations are consistent with the Field Development Plan provided in Volume 3 Appendix R.

Volume 4 Attachment E, Revised MNES Report; Table 18-38 delineates temporary and permanent activities as they are currently developed. Activities affecting conservation significant species can be directly related to landscape types i.e., woodland, riparian zones, grasslands and thereby specific vegetation clearing. Temporary activities including access track construction, tower assembly areas, brake and winch sites, construction camps have all been calculated along the alignment per conservation significant species. Permanent infrastructure including operational access, tower pads, substations and CEV huts have been similarly calculated. This table cross references hectare values across all activities with conservation significant species and it is expected that areas of impact may still reduce further with the completion of the detailed design.

Consequentially, supplied digital data pertaining to the following design elements: access tracks, line of sight clearance, tower pads, CEV huts and substations etc., when used in conjunction with the output of Table 18-38 provides suitably reliable information of expected impacts to conservation significant species and habitat.

Matters of State Environmental Significance

- Update the assessment of the adverse impacts of vegetation clearing under the State Development Assessment Provisions – State Code 16 in accordance with the comments provided by the Department of Resources.

Since the Draft EIS was completed, a review of the project responses to State Code 16 has been undertaken. These updates are displayed in Table 4-10 and Table 4-11.

Table 4-10 Updated project responses to State Code 16

Performance outcomes	Acceptable outcomes	Response
Clearing associated with watercourses and drainage features (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing, irrigated high value agriculture clearing)		
PO11 Clearing maintains the current extent of vegetation associated with any watercourse or drainage feature to protect: • bank stability by protecting against bank erosion • water quality by filtering sediments, nutrients, and other pollutants • aquatic habitat; and • terrestrial habitat.	**AO11.1** Clearing does not occur in any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code. OR	**AO11.1 Not applicable** Refer AO11.2
	AO11.2 Clearing within any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code: • does not exceed the widths in table 16.3.1 of this code; and • does not occur within 5 metres of the defining bank, unless clearing is required into or across the watercourse or drainage feature. OR	**AO11.2 Alternative solution** Clearing to ground level (below 1m) for construction access will be less than 10m in width. Other vegetation clearing / trimming may be required to achieve required conductor clearance across some watercourses. When required, the width will be variable (between 28m-60m) but will be cleared by hand to a height between 1.0m and 3.5m. This is likely to maintain existing bank stability, minimising erosion potential. In addition, aquatic habitat, filtering sediments / nutrients / pollutants will be unaffected.
	AO11.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of vegetation associated with any watercourse or drainage feature (a matter of state environmental significance).	**A011.3 Complies** Clearing resulting in acceptable significant residual impact to riparian RE have been included in the CopperString Project Biodiversity Offset Strategy. Refer Vol 4 Attachment G.

Performance outcomes	Acceptable outcomes	Response
Salinity (public safety, relevant infrastructure activities, consequential development of Integrated Planning Act 1997 approval, coordinated project, extractive industry, necessary environmental clearing, encroachment, fodder harvesting)		
PO22 Clearing does not contribute to or accelerate land degradation through waterlogging, or through the salinisation of groundwater, surface water or soil	**AO22.1** Clearing does not occur within 100 metres of a salinity expression area.	**AO22.1 Complies** The Project does not occur within a salinity expression area. Information pertaining to the presence or absence of salinity expression areas to be provided post EIS during secondary approval process.
Performance outcomes	**Acceptable outcomes**	**Response**
Conserving endangered and of concern regional ecosystems (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing, irrigated high value agriculture clearing)		
PO23 Clearing maintains the current extent of endangered regional ecosystems and of concern regional ecosystems.	**AO23.1** Clearing does not occur in an endangered regional ecosystem or an of concern regional ecosystem. OR	**AO23.1 Alternative solution** No Endangered RE will be impacted by the Project. The Of Concern RE 1.11.7 is a low, sparse woodland on hills and ranges, often comprising only minor components of heterogeneous polygons. This heterogenous vegetation has a total of 4.51 ha to be potentially impacted through the project activity. Vegetation between KP 2- 6DC, KP 72- 73DC, at KP95DM; surveys confirmed this RE not present. KP 29.5-30DC (Southern Connection); RE 1.11.7 was confirmed in small patches or narrow bands on the southwest slope. It is expected the positioning of towers will span over this vegetation. KP 14 -15SP (Selwyn-Woodya Connection); towers are currently positioned to span over this vegetation. The Of Concern RE 2.3.43 is a grassland community on alluvial plains that occurs between KP 620 -622WD at the Gilliat River crossing. Access to this section not yet possible; the extent of the this RE within the heterogenous polygon likely to reduce with field verified mapping. Potentially 2.45 ha Of Concern RE 2.3.43 will be impacted by the project activity. Towers positioned to avoid drainage depressions, where this RE predominates.

		The Of Concern RE 1.11.14 is a low open woodland community on clay soils that occurs between KP 20-23SP within the Woodya Connection Line. Access to this section not yet possible; extent of this RE within the heterogenous polygon likely to reduce with field verified mapping. The potential of 1.58 ha of this RE are likely to be impacted by the project activity. Towers are currently positioned to span over this vegetation. Information pertaining to the presence or absence 'of concern' RE is provided in Table 4-11.
	AO23.2 Clearing in an endangered regional ecosystem or in an of concern regional ecosystem does not exceed the width or area prescribed in table 16.3.1 of this code. OR	**AO23.2 Complies** No Endangered RE will be impacted by the Project. The Of Concern RE 1.11.7 is a low, sparse woodland on hills and ranges. Clearing width of 12m will be in compliance with regulations m as prescribed in table 16.3.1. It is expected that RE 1.11.7 can be over spanned. The Of Concern RE 2.3.43 is a grassland community on alluvial plains that will require very little clearing of vegetation in order to construct the Project. Clearing limits within Grassland structure categories per Table 16.3.1 is 12m wide to comply with regulations. Information pertaining to the presence or absence 'of concern' RE is provided in Table 4-11.
	AO23.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of endangered regional ecosystems and of concern regional ecosystems (a matter of state environmental significance).	**AO23.3 Alternative solution** No Endangered RE will be impacted by the Project. The Of Concern RE 1.11.7 is a low, sparse woodland on hills and ranges, often comprising only minor components of heterogeneous polygons. Several mapped polygons were ground truthed and do not occur. The micro-siting of towers has avoided or over spanned other occurrences of this RE and it is expected that any clearing will not exceed clearing limits as per Table 16.3.1. The Of Concern RE 2.3.43 is a grassland community on alluvial plains that will require very little clearing of vegetation in order to construct the Project. Micro siting of towers avoids drainage depressions, and the estimated disturbance is expected to be less the grassland clearing limit as per Table 16.3.1. A total allowance of 8.54 ha of 'of concern' RE has been included within Biodiversity Offset

		Management Strategy. Information pertaining to the presence or absence 'of concern' RE is provided in Table 4-11.
Performance outcomes	**Acceptable outcomes**	**Response**
Essential habitat (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing and irrigated high value agriculture clearing, fodder harvesting)		
PO24 Clearing maintains the current extent of essential habitat	**AO24.1** Clearing does not occur in essential habitat. OR	**AO24.1 Alternative solution** There is approximately 203.96 ha of mapped essential habitat intersected by the Project area. Where essential habitat is based on riparian corridors or gilgai landforms, towers are not to be situated in or directly adjacent to creek lines. In addition, towers are not positioned directly in gilgai, thereby limiting any potential impacts to the ornamental snake. Known occurrences of waxy cabbage palm have been avoided. In areas of high terrain, such as habitat for purple-necked rock wallaby, the transmission line has been designed to avoid resting/breeding and as preferred foraging habitat is grassland long-term effects will be limited. This is due to vegetation being maintained as vegetation up to 3.5m in height along the transmission corridor. In grassland communities that are habitat for Julia Creek dunnart, there will be minimal or no vegetation clearing. As the final design processes continues information pertaining to essential habitat is to be provided post EIS during secondary approval process.
	AO24.2 Clearing in essential habitat does not exceed the widths or areas prescribed in table 16.3.1 of this code. OR	**AO24.2 Alternative solution** Where the essential habitat is based on riparian corridors or gilgai landforms, the area of essential habitat cleared will likely 12m wide, specifically a 6m access track and 6m transmission line - line of sight. Towers are positioned to be outside of riparian zones. Conductor clearing will trim vegetation to 3.5m in height hence ground habitat will be maintained for ornamental snake. Towers and the transmission line are positioned to avoid known occurrences of waxy cabbage palm. Where the essential habitat is for purple-necked rock wallaby, the area of essential habitat cleared will likely be less than 20m In grassland communities that are habitat for Julia Creek dunnart, the area of essential habitat cleared will likely be less than 25m.

		As the final design processes continues Information pertaining to essential habitat is to be provided post EIS during secondary approval process
	AO24.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of essential habitat (a matter of state environmental significance).	**AO24.3 Alternative solution** The Project intersects a number of mapped essential habitat areas (203.96 ha total). Some of these areas contain value for the species they are mapped for; however, as they are a buffer of a previous record, some mapped areas will not contain values for these species. Further investigations will be required to verify the extent of essential habitat within the corridor selection. The Project aims to minimise the essential habitat required to be cleared by avoiding essential habitat where possible. As the final design processes continues Information pertaining to essential habitat is to be provided post EIS during secondary approval process.

Table 4-11 Estimated regional ecosystems within Project footprint

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
Remnant Of Concern								
1.11.10b/**1.11.14**/1.5.4d (70/**25**/5%)					7.37			7.37
1.11.2a/1.11.3a/**1.11.7** (70/20/**10**%)		1.95						1.95
1.11.2a/**1.11.7** (95/**5**%)			5.51					5.51
1.11.2a/1.11.8/**1.11.7** (80/15/**5**%)				1.64				1.64
1.11.3a/1.5.4d/**1.11.7** (80/15/**5**%)				13.94				13.94
1.5.3/1.5.4d/**1.11.7** (55/30/**15**%)				1.15				1.15
2.3.17a/2.3.7a/2.3.3/**2.3.43** (75/15/5/**5**%)		11.12						11.12
Total Of Concern mapped	**0.00**	**13.07**	**5.51**	**16.73**	**7.37**	**0.00**	**0.00**	**42.68**
Area within Project activity	**0.00**	**0.86**	**0.47**	**1.35**	**0.46**	**0.00**	**0.00**	**3.14**
Remnant Least Concern								
1.11.10b					3.60			3.60
1.11.10b/1.11.2a			2.75					2.75
1.11.10b/1.11.2a/1.3.13a					9.67			9.67
1.11.10b/1.11.3a		1.91	13.93					15.84
1.11.10b/1.11.3a/1.11.2a		21.85						21.85
1.11.10b/1.3.13a					1.58			1.58
1.11.11/1.11.3a			31.45	8.67				40.12
1.11.2a			25.99	3.27	5.63			34.89
1.11.2a/1.10.4a/1.7.1a/1.7.5a				14.59				14.59
1.11.2a/1.11.10b			4.53					4.53
1.11.2a/1.11.11				10.00				10.00

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
1.11.2a/1.11.3a		20.20	20.84	44.87				85.91
1.11.2a/1.11.3a/1.11.3b				1.89				1.89
1.11.2a/1.11.3a/1.11.8/1.11.3b			12.10					12.10
1.11.2a/1.11.3a/1.5.16					6.66			6.66
1.11.2a/1.11.3a/1.7.7a			62.17					62.17
1.11.2a/1.11.8			18.71	14.26				32.97
1.11.2a/1.5.3				3.73				3.73
1.11.2a/1.5.3/1.3.13a				8.30				8.30
1.11.2a/1.5.3/1.5.4d				4.67				4.67
1.11.2a/1.5.4d				0.46				0.46
1.11.2a/1.5.4d/1.11.8				1.15				1.15
1.11.2a/1.7.7a			18.66	7.63				26.29
1.11.2a/1.7.7a/1.11.3a			12.72					12.72
1.11.2a/1.7.7a/1.11.3a/1.11.8			14.34					14.34
1.11.2a/1.7.7a/1.11.8			29.89	0.03				29.92
1.11.2i					2.14			2.14
1.11.2i/1.5.16					36.82			36.82
1.11.2i/1.5.3/1.5.16					6.41			6.41
1.11.3a			23.15	0.77				23.92
1.11.3a/1.11.10b		14.87						14.87
1.11.3a/1.11.2a		49.56	89.50	41.56				180.62
1.11.3a/1.11.2a/1.11.3b			5.52					5.52
1.11.3a/1.11.2a/1.11.8			6.08					6.08
1.11.3a/1.11.2a/1.3.4a				13.42				13.42
1.11.3a/1.11.2a/1.5.16				19.30				19.30
1.11.3a/1.11.3b/1.3.13a				0.53				0.53
1.11.3a/1.3.4a		4.25						4.25
1.11.3a/1.5.16					0.91			0.91
1.11.3a/1.5.4d			14.50					14.5
1.11.3a/1.5.4d/1.11.2a			8.65					8.65

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
1.11.3a/1.5.4d/1.3.13a				1.44				1.44
1.11.3a/1.5.4d/1.5.16			21.62					21.62
1.11.3b		2.82	13.83	20.86	1.90			39.41
1.11.3b/1.11.2a			4.26					4.26
1.12.1			5.46					5.46
1.12.1/1.12.3b/1.5.4d/1.5.16				0.03				0.03
1.12.3a			11.22					11.22
1.12.3a/1.12.1			18.10					18.10
1.12.3a/1.12.1/1.12.7			7.10					7.10
1.12.3a/1.12.1/1.5.4d			1.29					1.29
1.12.3a/1.12.1/1.5.4d/1.12.7			17.64					17.64
1.12.3a/1.12.3b				5.88				5.88
1.12.3a/1.12.7				3.64				3.64
1.12.3a/1.5.4d/1.5.16			6.50					6.50
1.12.3b					1.72			1.72
1.12.3b/1.12.3a				13.69				13.69
1.12.3b/1.12.3a/1.5.16				12.62				12.62
1.3.13a		2.23	1.11	5.59				8.93
1.3.13a/1.3.4a		4.87		5.66				10.53
1.3.13a/1.3.4a/1.11.3a		8.65						8.65
1.3.13a/1.3.4a/1.3.6a		6.18						6.18
1.3.13a/1.3.4a/1.3.7b				3.81				3.81
1.3.13a/1.3.6a/1.3.7b		1.66		5.31				6.97
1.3.13a/1.3.7a/1.3.6a				2.76				2.76
1.3.13a/1.3.7b			8.98					8.98
1.3.13a/1.3.7b/1.3.6a				2.60				2.60
1.3.13a/1.5.4d/1.3.4a				2.98				2.98
1.3.13a/1.5.4d/1.3.4a/1.3.13a				0.91				0.91
1.3.4a		0.21			1.46			1.67
1.3.4a/1.3.13a/1.3.7b		3.95				0.96	1.02	5.93

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
1.3.4a/1.5.4d/1.3.6a				6.88				6.88
1.3.4b		1.06						1.06
1.3.4b/1.3.7b		2.86						2.86
1.3.6a				1.01				1.01
1.3.6a/1.3.13a		0.94		2.49				3.43
1.3.6a/1.3.7a				2.51				2.51
1.3.7a/1.3.6a		2.99	2.05					5.04
1.3.7a/1.3.7b/1.3.13a				4.32				4.32
1.3.7a/1.3.7b/1.3.6a		3.43	4.10					7.53
1.3.7b		1.03	14.18	0.83				16.04
1.3.7b/1.3.13a			3.68					3.68
1.3.7b/1.3.4a				1.75				1.75
1.3.7b/1.3.6a				4.04				4.04
1.3.7b/1.3.7a/1.3.13a					5.73			5.73
1.3.7b/1.5.3/1.3.13a				0.77				0.77
1.5.15/1.5.4d/1.3.4a				5.77				5.77
1.5.16/1.11.3a					0.28			0.28
1.5.16/1.3.4a		4.53						4.53
1.5.16/1.5.4d/1.11.2a					3.30			3.30
1.5.3/1.10.4a				1.77				1.77
1.5.3/1.10.4a/1.3.4a				8.78				8.78
1.5.3/1.11.2a/1.5.4d				5.60				5.60
1.5.3/1.11.2i/1.5.16					5.90			5.90
1.5.3/1.3.4a					5.44			5.44
1.5.3/1.3.4b/1.5.16				21.57				21.57
1.5.3/1.5.16		27.72						27.72
1.5.3/1.5.16/1.5.6c				10.37	10.67			21.04
1.5.4a/1.5.16/1.5.4d		3.70				16.73	14.08	34.51
1.5.4d		2.39	4.95	5.01				12.35
1.5.4d/1.11.2a/1.3.13a				3.62				3.62

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
1.5.4d/1.11.3a		19.08		32.56				51.64
1.5.4d/1.11.3a/1.3.4a				4.48				4.48
1.5.4d/1.11.3a/1.5.16		29.75		28.56		3.06		61.37
1.5.4d/1.12.3b/1.3.4a				5.97				5.97
1.5.4d/1.3.13a				6.37				6.37
1.5.4d/1.3.13a/1.3.4a				6.08				6.08
1.5.4d/1.3.4a				14.41				14.41
1.5.4d/1.5.16		14.09	8.46	15.20				37.75
1.5.4d/1.5.16/1.11.3b					5.25			5.25
1.5.4d/1.5.16/1.3.7b			7.70					7.70
1.5.4d/1.5.3/1.5.16				4.83				4.83
1.5.6c/1.5.16/1.3.4a					2.77			2.77
1.7.7a/1.11.2a/1.11.8			3.07					3.07
10.10.1a/10.10.5a	1.08							1.08
10.10.4b	0.10							0.10
10.10.4b/10.10.1a/10.10.5a	12.15							12.15
10.10.4b/10.10.4d/10.10.5a	13.29							13.29
10.3.10/10.3.9	6.61							6.61
10.3.11a/10.3.13a	0.97							0.97
10.3.11a/10.7.12b/10.3.14d	3.28							3.28
10.3.12a	2.30							2.30
10.3.12a/10.5.4a	2.13							2.13
10.3.12a/10.5.4a/10.3.6a	7.24							7.24
10.3.13a/10.3.13b	4.28							4.28
10.3.13b/10.3.13a/10.3.14a	8.59							8.59
10.3.14a	0.86							0.86
10.3.14b	0.41							0.41
10.3.14c	0.93							0.93
10.3.14c/10.3.14d	0.35							0.35
10.3.14d	3.24							3.24

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
10.3.25/10.3.4a/10.3.14b	2.01							2.01
10.3.28a/10.3.12a/10.3.28b	7.19							7.19
10.3.28a/10.3.12a/10.3.6a	12.74							12.74
10.3.28a/10.3.13a/10.3.6a	7.30							7.30
10.3.28a/10.3.28b	28.91							28.91
10.3.28a/10.3.6a	57.27							57.27
10.3.28a/10.3.6a/10.3.12a	0.65							0.65
10.3.4a	3.19							3.19
10.3.6a	2.89							2.89
10.3.6a/10.3.14a	5.83							5.83
10.3.6a/10.3.9	3.31							3.31
10.3.6a/10.5.5a	1.67							1.67
10.3.6a/10.5.5a/10.5.4b	6.57							6.57
10.3.6ax2	14.83							14.83
10.3.6ax2/10.5.5a	4.57							4.57
10.3.9	3.06							3.06
10.3.9/10.3.10	1.79							1.79
10.3.9/10.3.4a	6.05							6.05
10.3.9/10.3.6a	4.73							4.73
10.4.5	7.59							7.59
10.4.5x1	10.24							10.24
10.4.5x1/10.5.11c	0.59							0.59
10.4.8x1	15.44							15.44
10.4.8x1/10.3.14ax1	4.35							4.35
10.5.11c	31.84							31.84
10.5.11c/10.3.9/10.3.10	1.43							1.43
10.5.11c/10.5.2a/10.3.9	53.33							53.33
10.5.1a	29.47							29.47
10.5.1a/10.5.1b/10.5.11a	9.33							9.33
10.5.1a/10.5.1c	14.72							14.72

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
10.5.1a/10.5.1d/10.5.10	21.96							21.96
10.5.1a/10.5.1d/10.5.1c	77.40							77.40
10.5.1a/10.5.1e/10.10.4d/10.5.10	3.67							3.67
10.5.1c/10.5.10	19.43							19.43
10.5.1d/10.5.10/10.5.8a/10.5.1g	0.09							0.09
10.5.1d/10.5.1a/10.5.8a	13.65							13.65
10.5.1d/10.5.8a	3.23							3.23
10.5.1e/10.5.1a/10.7.7a/10.5.10	2.51							2.51
10.5.2ax1/10.3.14b	7.73							7.73
10.5.2b/10.5.11c	90.88							90.88
10.5.4a	1.79							1.79
10.5.4a/10.3.6a/10.5.5a	14.06							14.06
10.5.4a/10.5.10/10.5.1a	5.84							5.84
10.5.5a	22.60							22.60
10.5.5a/10.3.6a	42.04							42.04
10.5.5a/10.3.6a/10.3.12a	14.87							14.87
10.5.5a/10.3.6a/10.5.4b	18.49							18.49
10.5.5a/10.3.6a/9.3.6a	2.86							2.86
10.5.5a/10.3.6ax2	10.71							10.71
10.5.5a/10.3.6ax2/10.4.8x2	19.83							19.83
10.5.5a/10.5.4b	43.66							43.66
10.5.5a/10.7.7b	1.66							1.66
10.7.10a	2.77							2.77
10.7.10a/10.7.10b	14.72							14.72
10.7.10a/10.7.7b	1.72							1.72
10.7.1a	75.41							75.41
10.7.1a/10.7.1b	23.00							23.00
10.7.1b/10.7.1c/10.7.1a	11.95							11.95
10.7.3b	1.67							1.67
10.7.7a/10.7.10b	2.93							2.93

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
10.7.7a/10.7.7c	2.02							2.02
10.7.7b	0.04							0.04
11.11.15a	9.89							9.89
11.12.1	43.96							43.96
11.3.7/11.3.9/11.3.10/11.3.12	11.66							11.66
2.3.11		3.07						3.07
2.3.11/2.3.17a		2.29						2.29
2.3.17a/2.3.3		3.00						3.00
2.3.26d		1.49						1.49
2.3.26d/2.3.46		5.15						5.15
2.3.26d/2.3.7a		1.47						1.47
2.3.3		73.09						73.09
2.3.3/2.3.17a		41.50						41.50
2.3.3/2.3.17a/2.3.7a		16.53						16.53
2.3.3/2.3.4/2.3.17a		68.63						68.63
2.3.3/2.3.69b/2.3.17a		11.75						11.75
2.3.3/2.3.7a		2.20						2.20
2.3.3/2.3.7b		4.13						4.13
2.3.4		1.61						1.61
2.3.46/2.3.7a		7.44						7.44
2.3.46/2.3.7a/1.3.6c		2.63						2.63
2.3.69b/2.3.7a		0.95						0.95
2.3.7a		6.48						6.48
2.3.7a/2.3.46		6.91						6.91
2.3.7a/2.3.46/2.3.69b		3.45						3.45
2.3.7a/2.3.7b/2.3.17a		2.81						2.81
2.3.7b		0.50						0.50
2.4.2a		128.18						128.18
2.4.2a/2.3.3		3.56						3.56
2.4.2a/2.9.1		20.47						20.47

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
2.4.2b		12.36						12.36
2.4.3a/2.4.2a		0.77						0.77
2.4.3a/2.4.2b		5.32						5.32
2.9.1		8.65						8.65
2.9.1/2.9.4x1		26.65						26.65
2.9.4x1		3.16						3.16
2.9.4x1/2.9.1		2.92						2.92
2.9.4x1/2.9.1/2.3.7a		4.10						4.10
2.9.4x1/2.9.1/2.9.4a		20.03						20.03
4.3.10b					1.87			1.87
4.3.10b/4.3.4x2b					1.25			1.25
4.3.15	0.44	105.97						106.41
4.3.15/4.3.19/4.3.4f		122.02						122.02
4.3.15/4.3.19/4.3.4x2d		2.43						2.43
4.3.15/4.3.4f		12.70						12.70
4.3.15/4.3.4x2d	2.38	20.22						22.60
4.3.15/4.3.4x2d/4.3.19		44.27						44.27
4.3.17b					1.77			1.77
4.3.17b/4.3.20x1/4.3.4x2b					5.30			5.30
4.3.17b/4.3.2a					5.85			5.85
4.3.1a/4.3.10b					0.88			0.88
4.3.20x1/4.3.2a/4.3.10b/4.5.6x1					7.85			7.85
4.3.2a					0.78			0.78
4.3.2a/4.3.17b					1.47			1.47
4.3.4f		1.30						1.30
4.3.4f/2.3.50b		1.62						1.62
4.3.4f/4.3.15		3.46						3.46
4.3.4x2b/4.3.10b/4.3.11d/4.3.20x1					7.68			7.68
4.3.4x2d/4.3.19		1.61						1.61
4.4.1d					12.14			12.14

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
4.4.1d/1.5.4d/4.9.14x40a					7.16			7.16
4.4.1d/4.3.17b/4.9.14x40a/4.9.14x41					29.35			29.35
4.4.1d/4.3.20x1					0.02			0.02
4.4.1d/4.9.12x7a					13.41			13.41
4.4.1d/4.9.14x41					23.72			23.72
4.4.1d/4.9.14x41/4.3.17b					9.46			9.46
4.4.1d/4.9.14x41/4.3.17b/4.5.5c					11.07			11.07
4.5.3x1a/4.5.5c/4.7.7a/4.5.3x2					31.58			31.58
4.5.5c/4.4.1d					9.37			9.37
4.7.4e/4.9.7a	8.34							8.34
4.7.7a					11.43			11.43
4.7.7a/4.5.6x1					9.75			9.75
4.7.7a/4.7.2x1b/4.5.5c					5.05			5.05
4.7.8b/4.7.2x1b/4.5.3x1a/4.7.7a					12.29			12.29
4.7.8b/4.7.2x1b/4.7.4b					5.10			5.10
4.7.8b/4.7.4b/4.7.2x1b					9.97			9.97
4.7.8b/4.9.13x1					0.25			0.25
4.9.11/4.9.7a	0.32							0.32
4.9.12x7a					6.87			6.87
4.9.1a/4.9.8		213.15						213.15
4.9.1c	70.38	789.12						859.50
4.9.1c/4.4.1x4b		4.47						4.47
4.9.1c/4.9.11	1.28							1.28
4.9.1c/4.9.12x8		231.60						231.60
4.9.7a	2.94							2.94
4.9.7a/4.9.1c	0.91							0.91
9.11.1a	27.59							27.59
9.11.1b	45.31							45.31
9.11.2a	23.10							23.10
9.11.2a/9.11.17	6.18							6.18

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
9.11.2a/9.11.1b	3.91							3.91
9.12.19	8.14							8.14
9.12.1a	316.59							316.59
9.12.1a/9.11.5	2.40							2.40
9.12.1a/9.12.4b	3.04							3.04
9.12.1b/9.12.32	149.56							149.56
9.12.22/9.12.34	22.59							22.59
9.12.34	0.01							0.01
9.3.1	22.75							22.75
9.3.1/9.3.12a	3.69							3.69
9.3.1/9.3.19b	3.98							3.98
9.3.1/9.3.3b	1.03							1.03
9.3.1/9.3.6a	2.17							2.17
9.3.12a/9.3.12b	1.43							1.43
9.3.3b	0.82							0.82
9.3.6a/10.3.6a	3.17							3.17
Corridor selection	**1795.85**	**2313.97**	**580.78**	**492.43**	**360.53**	**20.75**	**15.10**	**5579.41**
1.11.11/1.11.3a		0.06						0.06
1.11.2a/1.11.3a/1.5.16				4.46				4.46
1.11.2i				1.11				1.11
1.11.2i/1.5.3/1.5.16				0.49				0.49
1.11.3a		5.21						5.21
1.11.3a/1.11.2a			2.00					2.00
1.5.3/1.3.4a				1.10				1.10
1.5.3/1.5.16				1.03				1.03
1.5.3/1.5.16/1.5.6c				7.61				7.61
1.5.4a/1.5.16/1.5.4d		28.74						28.74
10.3.28a/10.3.28b/10.3.6a	3.55							3.55
10.3.6a/10.5.5a/10.5.4b	0.81							0.81
10.5.11c/10.5.2a/10.3.9	0.68							0.68

RE Code	Renewable Energy Hub	CopperString Core	Mount Isa Augmentation	Southern Connection	Woodya Connection	Chumvale E-Henry Connection	MMG Connection	Total area of mapped habitat intersected by the project footprint (ha) *
10.5.4a/10.3.6a	1.95							1.95
11.12.1	3.69							3.69
11.3.7/11.3.9/11.3.10/11.3.12	39.22							39.22
2.4.2a		0.62						0.62
4.3.15/4.3.4x2d		1.19						1.19
4.3.2a					0.51			0.51
4.4.1d/4.3.20x1					0.82			0.82
4.7.7a					3.02			3.02
4.9.1a/4.9.8		0.74						0.74
4.9.1c		31.55						31.55
4.9.1c/4.9.12x8		0.62						0.62
9.12.1b/9.12.32	0.65							0.65
Other infrastructure	**50.55**	**68.73**	**2.00**	**15.80**	**4.35**	**0.00**	**0.00**	**141.43**
Total Least Concern mapped	**1846.40**	**2382.70**	**582.78**	**508.23**	**364.88**	**20.75**	**15.10**	**5720.84**
HVR Least Concern								
10.4.5x1	0.69							0.69
10.5.11c/10.5.2a/10.3.9	0.74							0.74
Total Least Concern mapped	**1.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.43**
Area within Project activity	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Non-remnant								
Corridor selection	226.14	31.86	1.32		0.45			259.77
Other infrastructure	27.82	18.00	7.00		0.15			52.97
Total Non-remnant mapped	**253.96**	**49.86**	**15.83**	**0.00**	**0.60**	**0.00**	**0.00**	**312.74**

* Footprint is equivalent to the Construction Footprint for Laydowns and CEV Huts, Easement, Land Acquisition and Adjusted Substation Footprints.

Matters of State Environmental Significance

- Provide information on how cleared vegetation material will be managed, particularly the management and disposal of cleared weeds

Information pertaining to the management of weed species is highlighted within Draft EIS, Appendix Q Framework for Environmental Management, Appendix R Field Development Plan and Appendix U Concept Biosecurity Plan with additional construction specific planning identified within Attachment I Additional Management Plans for the Construction Environmental Management Plan sub plan – Biosecurity Management.

Matters of State Environmental Significance

- Provide information on how locally important weed species will be identified and managed.

Locally important weed species are highlighted within the Draft EIS Vol 3, Appendix U – Concept Biosecurity Plan with additional construction specific planning identified within Attachment I Additional Management Plans for the Construction Environmental Management Plan sub plan – Biosecurity Management.

Matters of State Environmental Significance

- Identify how cleared vegetation will be rehabilitated once project construction is completed.

Vol 3, Appendix T (Concept Rehabilitation Plan) of Draft of the Draft EIS contains information concerning the rehabilitation of vegetation within the Project. In addition, construction specific planning is located in Attachment I Additional Management Plans for the Construction Environmental Management Plan sub plan – Soil Management.

4.5 Additional information transport

Transport

- Respond to comments regarding the preparation and development of a Road Use Management Plan and Traffic Management Plans in consultation with local councils and Department of Transport and Main Roads

The Project will continue to address issues of road transport and safety with the Department of Transport and Main Roads, Locals Councils and the Queensland Police Service in line with their legislation and policies. This will include the development of a Road Use Management Plan and Road Impact Assessment Reports for elements of the Project particularly between construction work hubs and the corridor selection. The ECI JV has developed a Traffic Management Plan (Volume 4 Attachment I Additional Management Plans) which identifies within each work hub impacted roads and traffic management works that will need to be undertaken. It is noted that this Traffic Management Plan has been provided for the CopperString Project but this document includes other components which are not included in the EIS assessment (Flinders spur line). This plan are still under development, however this draft version has been provided to demonstrate how and when key transport aspects will be managed during construction.

Transport

- Provide a table that clearly summarises all instances where the project is proposing to locate third party infrastructure (including transmission lines) within and/or over the state-controlled road network.

At this stage no third-party infrastructure is expected to be developed within the state-controlled road network, except for the conductor wires passing overhead. A revised road crossing register indicate 13 locations where the corridor selection will cross a state-controlled road. The revised road crossing register includes state controlled roads and locally controlled roads. The register can be found in Table 4-3.

Transport

- Provide information on whether the project will impact on existing flood regimes and stormwater flow behaviours relevant to railway corridors along the project corridor. Where impacts are predicted, detail what mitigation measures will be undertaken (e.g. diversion or interception of overland flow).

No project infrastructure is expected to be developed within close proximity to existing railway corridors that would result in changes to existing flood levels. Vehicle access required during construction will predominantly utilise existing rail occupational crossings (where required). Traffic assessments including queuing near these locations have not been undertaken at this stage however any improvements required to road pavements to support construction loads will be designed and undertaken with prior consultation and approval by TMR and the relevant local council.

A further desktop flood risk study has been undertaken since the Draft EIS (refer to Volume Attachment J Flood Risk Assessment). CuString are continuing to address road and rail network impacts with TMR as further construction planning is completed. At this stage CuString are satisfied with the TMR recommendations for draft conditions regarding the CGs evaluation report.

4.6 Additional information water quality, water resources and flooding

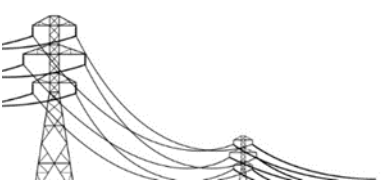
Water Quality

- Describe the environmental values, management intent and water quality objectives relevant to each of the waterways traversed by the project.

The project terms of reference (section 12.37) requested the proponent to provide an overview of water-related environmental values, including existing surface water and groundwater that may be impacted. This overview was provided within Volume 2 Chapter 9, Section 9.3.2.

The project alignment crosses several catchment basins, of which many major waterways are traversed. These waterways provide Environmental Values (EVs) that support important processes for both the ecosystem and human usage. The Environmental Values are drawn from the list provided in the Environmental Protection (Water) Policy (2009) for Queensland waters that are to be enhanced or protected, and further adapted from the draft EVs for the Burdekin Basin (ref DSITI, 2017). The EVs identified across the expanse of the project are:

- Aquatic Ecosystem; the biological integrity of an aquatic ecosystem, with consideration to any human induced modifications towards biological, physical, chemical, or other indicators.
- Stock Watering; suitability of water supply for production of healthy livestock.



- Cultural Values; cultural, spiritual and ceremonial values of water means, defined by its aesthetic, historical, scientific, social or other significance, to the past, present or future generations.

Most of the waterways traversed by the project are ephemeral, remaining dry for most of the year and only filling after periods of prolonged or heavy rainfall. For this reason, many of the EVs are absent from the waterways until they retain water, of which the water level has a bearing on the effectiveness of the EVs. The list of major waterways traversed by the project and their respective Environmental Values are shown in Table 4-12.

Table 4-12 Environmental values of each major waterway traversed by the project

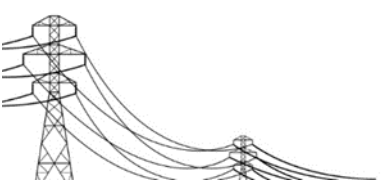
Catchment	Major Waterways	Approximate Location (KP)	Ecological Values
Burdekin	Unnamed	23.4WD	Aquatic Ecosystem, Stock Watering
		24.4WD	Aquatic Ecosystem, Stock Watering
	Unnamed	35.3WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Oaky Creek	48.6WD	Aquatic Ecosystem, Stock Watering
	Pandanus Creek	55.4WD	Aquatic Ecosystem, Stock Watering
	Vine Creek	69.0WD	Aquatic Ecosystem, Stock Watering
	Burdekin River	71.2WD	Aquatic Ecosystem, Stock Watering
	Unnamed	72.0WD	Aquatic Ecosystem, Stock Watering
	Cornishman Creek	78.8WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Lighthouse Creek	83.8WD	Aquatic Ecosystem, Stock Watering
	Charlie Creek	85.8WD	Aquatic Ecosystem, Stock Watering
	Horse Creek	104.8WD	Aquatic Ecosystem, Stock Watering
	Unnamed	107.2WD	Aquatic Ecosystem, Stock Watering
	Oaky Creek	123.9WD	Aquatic Ecosystem, Stock Watering
	Unnamed	124.8WD	Aquatic Ecosystem, Stock Watering
	Homestead Creek	138.2WD	Aquatic Ecosystem, Stock Watering
	Campaspe River	161.3WD	Aquatic Ecosystem
	Manoa Creek	174.9WD	Aquatic Ecosystem, Stock Watering
	Cape River	180.5WD	Aquatic Ecosystem, Stock Watering
	Unnamed	181.4WD	Aquatic Ecosystem, Stock Watering
	Sandy Creek	200.8WD	Aquatic Ecosystem, Stock Watering
	Warrigal Creek	201.3WD	Aquatic Ecosystem, Stock Watering
	Gorge Creek	206.7WD	Aquatic Ecosystem, Stock Watering
	Moocha Creek	212.3WD	Aquatic Ecosystem, Stock Watering
	Unnamed	222.5WD	Aquatic Ecosystem, Stock Watering
Cooper Creek	Torrens Creek	248.0WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Bullock Creek	272.0WD	Aquatic Ecosystem, Stock Watering
Flinders	Walker Creek	379.9-383.2WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Warianna Creek	383.3WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Unnamed	383.8WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Unnamed	384.3WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Eastern Creek	401.5WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Sloane Creek	402.6WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Unmapped	446.5WD	Aquatic Ecosystem, Stock Watering
	O'Connell Creek	448.5WD	Aquatic Ecosystem, Stock Watering

Catchment	Major Waterways	Approximate Location (KP)	Ecological Values
	Alick Creek	487.1-488.1WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Alick Creek	526.3-527.3WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Alick Creek	544.5-546.8WD	Aquatic Ecosystem, Stock Watering, Cultural Values
	Julia Creek	587.5-588.4WD	Aquatic Ecosystem, Stock Watering
	Eastern Creek	600.5-603WD	Aquatic Ecosystem, Stock Watering
	Sadowa Creek	610-610.9WD	Aquatic Ecosystem, Stock Watering
	Gilliat River	625.8-627.8WD	Aquatic Ecosystem, Stock Watering
	Gidya Creek	632.8-636.2WD	Aquatic Ecosystem, Stock Watering
	Fullarton River	662.5WD	Aquatic Ecosystem, Stock Watering
	Scrubby Creek	675.5WD	Aquatic Ecosystem, Stock Watering
	Williams River	683.6WD	Aquatic Ecosystem, Stock Watering
	Elder Creek	687.8WD	Aquatic Ecosystem, Stock Watering
	Cloncurry River	728WD	Aquatic Ecosystem, Stock Watering
	Corella River	31DM	Aquatic Ecosystem, Stock Watering, Cultural Values
	Cloncurry River	39.4-39.6DS	Aquatic Ecosystem, Stock Watering
	Florence Creek	49.5DS	Aquatic Ecosystem, Stock Watering, Cultural Values
	Cloncurry River	71.2-71.4DS	Aquatic Ecosystem, Stock Watering
Georgina	Burke River	42.7SW	Aquatic Ecosystem, Stock Watering, Cultural Values
Leichhardt	Leichhardt River (East Branch)	65.5DM	Aquatic Ecosystem, Stock Watering, Cultural Values
	Leichhardt River	97.2DM	Aquatic Ecosystem, Stock Watering, Cultural Values

The management objectives for water resources are outlined in Appendix Q Framework Environmental Management Plan.

There are no established Water Quality Outcomes (WQOs) for waterways within the Project areas. WQOs will be established from perennial creek sources with quantitative water quality data collection prior to the construction phase. Empirical data has been recorded documenting the qualitative attributes of many waterways, which will assist in justifying WQOs. Due to the locality of the project alignment, most waterways are only accessible via transport routes unable to be utilised during wet periods. Thus, data collection will not specifically occur post-rainfall events but rather during regularly scheduled site works. The data will inform WQOs and be based on the waterway attributes relevant to the EVs, including; turbidity, pH level, dissolved oxygen and visible debris/hydrocarbons.

A Water Quality Plan will be maintained as part of the Construction Environmental Management with scheduled sampling upstream and downstream of waterway crossings to track the Project's impact on the aquatic environment.



Water Quality

- Provide a risk assessment of the risk to water quality from the project to waterways traversed by the project, considering factors such as:
  - the extent of land expected to be disturbed in the catchment of each waterway
  - the environmental values, particularly riparian values
  - the management intent (including proximity to any areas of High Ecological Value)
  - the water quality objectives that apply in each catchment.

With the exception of the major river systems within the Project area, waterways that intersect the Project are mostly ephemeral. Earthworks required for project construction are shallow and are not expected to encounter or interfere with existing groundwater resources or groundwater quality. Further information describing surface water environmental values was recorded from ecological field surveys provided in Volume 3 Appendix P Ecological assessment. These observations confirm that, the majority of sites visited near the corridor selection within the Burdekin, Flinders, Leichhardt and Georgina catchments displayed evidence of disturbances and degradation by cattle (e.g. weeds, erosion, and reduced water quality). The exceptions were sites 1A-A (Haughton river catchment) and 1A_I-K (Coopers Creek catchment), which both showed little sign of disturbance. At the time of the aquatic surveys, the majority of sites were ephemeral and contained isolated pools or were dry. It is expected that these sites have run and pool habitat in the wet season, however these were not evident at the time of survey. Channel characteristics at the proposed crossing locations were observed to be consistent across the study area. Larger high-order creeks and rivers were characterised by wide, sandy channels with moderately high banks and occasional braided channels and wetlands associated with the main watercourse. Smaller, low-order creeks were typically characterised by a series of braided channels and relatively low banks. Watercourse environmental values / characteristics were summarised for each catchment in Volume 3 Appendix P Ecological assessment table 3-10 and risks to water quality due the project were considered low. Since the publication of the Draft EIS further waterway assessments have been undertaken that cover a broader area of the Project footprint (refer to Volume Attachment F Additional Information Flora and Fauna – Waterway Assessments).

Volume 2 Chapter 9 – Water Resources and Water Quality outlines the management intent and management and mitigation measures for maintaining water quality across the project area. A risk assessment that outlines unmitigated risks and mitigated risks is also provided in this chapter.

Water Resources

- Provide further detail regarding the commitment to manage potential disturbance/impacts to water features, including what mitigation and management strategies will be used where disturbance/impacts may occur.

Ground surface disturbance within each catchment is predominantly 6.0m wider (vehicle access) and to establish tower pads (within tower assembly areas spaced approximately at 600m intervals). Tower pads and assembly areas will be placed outside of buffer distances to waterways contain temporary erosion and sediment controls during construction. A breakdown of total area intersected by the project (includes total easement area) and the expected disturbance within the six catchments is provided as follows:

Table 4-13 Estimated disturbance within catchments

Catchment	Area intersected (ha)	Disturbance area intersected (ha)	Percentage of Total Footprint (%)
Burdekin	1303.73	103.56	7.94
Cooper Creek	496.56	49.09	9.89
Flinders	3470.83	337.09	9.71
Georgina	403.93	40.91	10.13
Haughton	103.59	47.37	45.73
Leichhardt	291.29	27.28	9.36
Total mapped	**6069.92**	**605.30**	**9.97**

Water Quality

– Using the outcomes of the risk assessment, identify the proposed management and mitigation strategies proposed for any predicted impacts.

Construction activities have the potential to generate localised dust, erosion, run-off and sedimentation through increased vehicle movements, clearance of vegetation and earthworks. These impacts will be over a short duration and contained within the linear footprint of the project and mitigated through the implementation a range of controls including:

- buffer distances (15m from the top of bank) between tower assembly areas and waterways \ watercourses
- implementing erosion and sediment controls
- Limiting ground disturbance within bed and banks of watercourses to be only for vehicle access (6.0m wide bed level crossing)
- where vegetation requires removal it is required it is done by hand above ground level.
- water trucks will be utilized as a dust control at work sites and along the access track to contain particle movement.

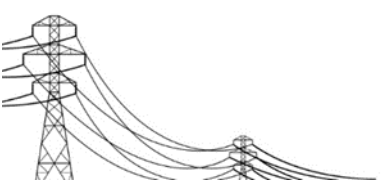
Volume 3 Appendix Q, Section 4.5.3 confirms that water quality management measures will be developed pre-construction within the CEMP, consistent with the measures outlined in the Concept ESCP provided in Volume 3 Appendix S. The Concept ESCP confirms that site inspections and water quality monitoring may include specific water quality sampling and detailed logbook entries of the site's monitoring and maintenance activities. Given that the Project traverses nearly 82 watercourses, which are mostly ephemeral, water quality sampling is not feasible at all locations.

At this stage in the project the ECI JV has made provision to undertake water quality monitoring using portable water quality data loggers. It is expected that observations upstream and downstream of where the corridor selection intersects watercourses will be monitored and results compared and reported to determine compliance with the environmental objectives for surface water from the construction environmental management plan. Refer to Attachment I Additional Management Plans for the Construction Environmental Management Plan sub plan - Surface Water Management.

Water Resources

– Provide further detail on how existing water licence holders (such as Council and landholders) will not be negatively impacted during the construction phase, including if the assumptions for water usage during the construction phase change.

The ECI JV has undertaken an assessment of available water supply options within close proximity to the corridor selection for use as construction water. This assessment included a stocktake of the



bores and overland water sources in close proximity to the corridor selection. Consultation will occur with the Department of Resources regarding the approval for use of existing or development of new water licences with the landowner or Local Council's consent.

The water demands for the project have been revised by the ECI JV and have been estimated to be 666,510kL as described in the revised project description provided in Volume 4 Attachment B. Permits and water licences will likely be obtained during the detailed design phase prior to extraction of water and for use on the project. These locations are not known at this stage. Further consultation with the Department is expected to continue.

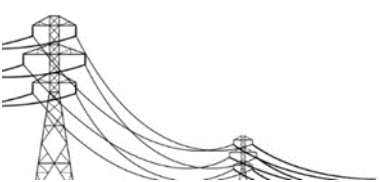
Flooding

- Provide further detail on assessment of flood risk which for the project, including:
  - rationale for the design of transmission lines and infrastructure
  - assessment of and potential flooding impacts to surrounding properties and infrastructure
  - management plans for flood mitigation and management of soil erosion where there is potential for flooding impacts.

The project infrastructure is not expected to result in changes to existing flood levels. Only transmission tower pads and lattice tower structures will be placed within existing flood plains or near waterways subject to seasonal flooding. Tower footings and tower pads in these areas will be designed to withstand expected flooding patterns and not result in scouring effects that will contribute to long term erosion.

A desktop high level flood risk assessment has been undertaken to provide guidance on the evaluation of flood risks expected for the project and recommendations to be considered when flood modelling will be undertaken during the detailed design (refer to Volume Attachment J Flood Risk Assessment). The report includes peak discharge estimates for waterways within each catchment. A description of the hydraulic parameters expected along the corridor selection which includes an estimate of the number of towers affected. Some flood plains are in the order of 20k wide with the potential to inundate almost 30 towers. Notwithstanding the depths and velocities of waters in these events is expected to be shallow and slow. Further detailed hydraulic modelling will occur during the detailed design process that will utilise the risk classification from this desktop assessment (refer to Volume Attachment J Flood Risk Assessment).

Construction works and scheduling will limit activities in areas prone to flooding during the wet months of December to March, inclusive. Temporary erosion and sediment control will be implemented along the transmission line and at substation sites to prevent soil erosion during construction activities.



4.7 Additional information land, soils and geology

Land, soils and geology

- Provide further detail on commitments to manage potential impacts on rural land fragmentation, including the proposed mitigation strategy in instances where there is disruption to agricultural production.
- Identify how impacts to grazing and livestock carrying activities will be avoided, managed or mitigated.

Rural land fragmentation has been avoided as far as practicable by minimising disruptions to agricultural production through consulting with landholders on placement of easement to avoid areas of infrastructure and areas which will impede on stock movements.

As the area is predominantly used for grazing, it is expected that this will continue. The easement will not have access restricted by fences or gates unless by request of the landholder. Specific conditions in the Landholder Options Agreements have been negotiated with some landholders which state how the easement on their properties will be managed during construction and operation.

Land, soils and geology

- Provide relevant information on the use of potential chemical stabilisers / plant growth enhancers to avoid the risk of nutrients or other contaminants being released to waterways during rainfall events during construction.

The ECI JV has stated there are no potential chemical stabilisers or plant growth enhancers that will be used on the Project. A hydroseed/mulch may be used for rehabilitation at certain locations along the alignment.

Land, soils and geology

- Confirm if the Revised Universal Soil Loss Equation (RUSLE) will accurately inform predictions of soil loss dues to the construction of transmission lines, particularly regarding access areas.

While the RUSLE soil loss equation is primarily used as an indicator of potential soil loss, it does provide sufficient information and detail for the purpose of setting sediment control standards for the project and this EIS. The use of the RUSLE equation is consistent with the 'Best Practice Erosion and Sediment Control' Guidelines, International Erosion Control Association, (IECA) 2008. These guidelines have been developed and are frequently used to provide assistance in the development of erosion and sediment control during planning, design, installation and maintenance for a construction site and will also form the basis of this project. The utilisation of this approach will also facilitate the minimisation of environmental harm through identification of best practice erosion and sediment control on site which also meets in the intent of this EIS.

Land, soils and geology

- Provide detail on salinity indicators and measures to avoid, manage or mitigate potential project impacts, such as a Salinity Management Plan.

The Project is expected to have a very low physical impact on landforms and soils generally and where appropriate mitigation measures will be implemented to manage potential risks including risks associated with salinity. Excavations for the Project are not anticipated to reach depths that will

impact groundwater or result in waterlogging. Alteration of hydrological regimes or groundwater interactions are unlikely to result from the construction or operation of the Project. Therefore, a Salinity Management Plan has not been prepared due to the low risk and the ability of other management plans to suitably mitigate. Commitments to manage potential impacts to soils including salinity are:

- Develop and implement an erosion and sediment control plan
- Develop and implement a vegetation management plan
- Develop and implement a rehabilitation plan.

4.8 Additional information economics

Economic matters

- In response to submissions, please provide updated information in relation to economic matters including:
  - further detail on the predicted impacts on electricity pricing associated with this project
  - a demand analysis for the project, including updates on expressions of potential customer interest or connection with renewable energy proposals
  - alternatives to the project that have been considered and justification for why the project proposed is the preferred option
  - a sensitivity analysis for changes in future gas costs and energy consumption in the NWMP in addition to that provided in the draft EIS
  - whether the Australian Energy Regulator's standard regulatory investment test for transmission (RIT-T) process will be undertaken for the project and if so the timing for this.

Additional information on the economics of the Project has been prepared as a technical note (refer to Volume 4 Attachment H Additional Information Economics) on the following matters:

- Predicted impacts on electricity pricing
- demand analysis including updates on expressions of potential customer interest and connections with renewable energy proposals
- alternatives to the Project that have been considered
- sensitivity analysis for changes in future gas costs and energy consumption in the NWMP
- discussion on the use of Australian Energy Regulators standard regulatory investment test for transmission (RIT-T).

Real income is a measure of the ability to purchase goods and services, adjusted for inflation. A rise in real income indicates a rise in the capacity for current consumption, but also an increased ability to accumulate wealth in the form of financial and other assets. The change in real income from a development is a measure of the change in welfare of an economy.

ACIL Allen has undertaken computable general equilibrium (CGE) modelling and over the period 2020 to 2050, under the NEM connected case, CopperString 2.0 is projected to increase the real income of:

- North-West Queensland by a cumulative total of $17.4 billion relative to the Business As Usual (BAU) Case (with a net present value of $10.4 billion, using a 3 per cent real discount rate)
- Queensland as a whole by a cumulative total of $54.3 billion relative to the BAU Case (with a net present value of $31.7 billion, using a 3 per cent real discount rate)

- Australia as a whole by a cumulative total of $78.4 billion relative to the BAU Case (with a net present value of $45.8 billion, using a 3 per cent real discount rate).
- To place these projected changes in income in perspective, the discounted present values (using a 3 per cent real discount rate) are equivalent to a one-off increase in income of $16,000 per household or an average increase in income of $660 per household per year over the period to 2050.

4.9 Additional information waste management

Waste management

- Provide estimates of the anticipated volumes of waste to be created by the project and the proposed waste disposal strategies, including the use of any existing council facilities.
- Provide specific cross reference to sections in the draft EIS or revised draft EIS where the waste reduction hierarchy has been demonstrated

The Project has committed to following the waste management hierarchy as part of its project principles. References can be found as follows:

- Volume 3 Appendix Q Framework Environmental Management Plan
- Volume 4 Attachment I Additional Management Plans – Waste and Disposal Management Plan.

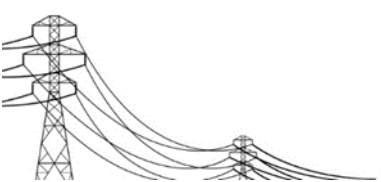
The Waste Refuse and Disposal Management Plan developed by the ECI JV outlines the waste management hierarchy that will be adopted including waste classification and how waste will be avoided and minimised. It details the estimated types and volumes of waste that the Project is expected to create and the proposed disposal strategies. It also identifies potential waste facilities to be used within Local Government Areas and details the types and volume of waste accepted at the facilities, capacity of the facility and the facility opening hours.

4.10 Additional information cumulative impacts

Cumulative impacts

- Provide further cumulative impact assessment that specifically considers impacts on land, geology and soils, water resources and quality, air quality and GHG, noise and vibration, social, and cultural heritage

The nature of the project is over a long linear area with the majority of impacts localised. The impacts associated with land, geology, soils and water resources and water quality, air quality and GHG, noise and vibration, social, and cultural heritage are expected to be low and targeted management and mitigation measures developed during the draft EIS, will avoid potential cumulative impacts.



4.11 Additional information cultural heritage

Cultural Heritage

– Describe the legislative framework for the reporting and management of non-indigenous archaeological discoveries as identified in the relevant submission.

To report and manage non-indigenous cultural heritage finds, as per Section 89 of the Queensland Heritage Act 1992, CopperString will provide notification to the Department of Environment and Science, as soon as practicable, following the discovery of a non-Indigenous artefact in the Project Area. CopperString will not interfere with the archaeological artefact until at least 20 business days after providing notification to DES, unless written consent has been given, as per Section 90 of the Queensland Heritage Act 1992.

Negotiation of the Cultural Heritage Management Plans (CHMPs) with the nominated Traditional Owners has commenced and is progressing in a manner that will achieve agreement between the Sponsor and Traditional Owner with final approval of each CHMP in place prior to construction works commencing. Cultural Heritage surveys have also been undertaken across some areas of the proposed transmission alignment with Cultural Heritage finds identified and these will be managed in accordance with the CHMPs.

4.12 Additional information employment

Employment

– Provide information on the number and types of roles expected to be filled locally or regionally, within Queensland, or nationally/internationally.

CuString and the ECI JV are committed to maximising Australian content across every aspect of the Project. The Project's ability to secure Australian products and services is even more important in the current and post COVID-19 environment. Opportunities to stimulate the local, regional and national economy will be a focus of the procurement strategy.

The Joint Venture procurement strategy has developed the following plans:

- Local Industry Participation Plan
- Local and Indigenous Employment Engagement and Training Plan
- Procurement and Logistics Management Plan.

These plans are provided in Volume 4 Attachment I Additional Management Plan and Commitments Register. The Local Industry Participation Plan has been designed to ensure appropriate engagement with local communities to enhance regional economies through local procurement where cost effective to do so and to ensure compliance with the local industry participation outlined in the CopperString 2.0 Procurement Plan and Corporate Policy, reflecting State and Federal Government Procurement Policy requirements.

The Joint Venture party anticipates that 100% of roles will be sourced from within Australia including employees from local areas, regional areas, Queensland and interstate. This will include a mixture of the JV partners direct employees, specialist subcontract resource partners and training of local personnel who may possess the right skills. This will give the added benefit of long-term employment for locals during the Operations and Maintenance phase of the project. Specialised works associated with the line and substation delivery such as stringing, and tower assembly and erection will predominantly be supplied from internal resource pools and supported by subcontract partners.

Employees are expected to be sourced from within the local region, within Queensland and interstate (refer Table 4-14). The peak employee numbers are provided in

Table 4-15 with a peak employment of 757 FTE anticipated during December 2023.

Table 4-14 Anticipated Source of Workforce

Annual construction employment numbers	757 No. (Peak)	Source of supply (percent)					Number of FTE by year			
Region based (not FIFO or DIDO)		Local region (Mt Isa and transmission line regions)	Rest of Qld	Other Australia	Overseas	TOTAL	2021-2022	2022-23	2023-24	2024-25
Local region (Mount Isa and transmission line regions)	Jobs	15%	0%	0%	0%	15%	25	114	99	37
Rest of Qld	Jobs	-	-	-	-	-	-	-	-	-
Other Australia	Jobs	-	-	-	-	-	-	-	-	-
Overseas	Jobs	-	-	-	-	-	-	-	-	-
FIFO/DIDO to Local Region										
From Rest of Qld	Jobs	-	67%	-	-	67%	110	507	444	164
From Other Australia	Jobs	-	-	18%	-	18%	30	136	119	44
From Overseas	Jobs	-	-	-	0%	0%	0	0	0	0

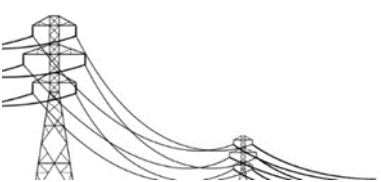
Table 4-15 Peak employee numbers per annum

Construction Year	Annual Construction Employment Numbers
2021/2022	164
2022/2023	757
2023/2024	663
2024/2025	245

Employment

- Where any international workers are proposed, provide detail on why it is necessary (e.g. if skills for transmission line construction are expected to be constrained during the project recruitment).

All employees of the Project construction workforce are anticipated to be sourced from within Australia. CuString has commenced an ECI JV who have identified that there is currently a limited number of Cert III qualified linesmen within Australia. The ECI JV will further engage with industry, trade and training organisations regarding skills recruitment for the project to address any shortfalls.



4.13 Additional environmental management plans

Management plans

- In line with project updates, design/methodology refinements and responses to draft EIS submissions, provide new or updated management plans including:
  a. construction environmental management plan (CEMP) and associated or sub-plans
  b. operational environmental management plan (OEMP) and associated or sub-plans
  c. bushfire management plan
  d. workers accommodation management plan.
- The new or updated plans above are to provide detail on proposed mitigation and management measures that would be applied, including a description of their effectiveness.

The following environmental management plans have been developed (refer Volume 4 Attachment I Additional Management Plan and Commitments Register).

- Local and Indigenous Employment Engagement and Training Plan
- Accommodation Management Plan
- Bushfire Management Plan
- Construction Methodology
- Local Industry Participation Plan
- Community Liaison Management Plan
- Traffic Management Plan
- Waste and Refuse Disposal Management Plan
- Interface Management Plan
- Sustainability Management Plan
- Procurement and Logistics Management Plan
- Helicopter Stringing Management Plan
- Risk Management Plan

A Construction EMP and an Operational EMP has not been developed for the project at this stage. These management plans will be developed during the detailed design phase so that mitigation measures are consistent with the final design technical specifications.

4.14 Additional information commitments register

Commitments

- Provide an updated commitments register consolidating:
  - commitments made in the draft EIS
  - and any additional commitments made in response to submissions or the preparation of the revised draft EIS
- Ensure all commitments in this updated register are specific, with measurable outcomes and clear timeframes.

The commitments register has been updated to refer to management plans developed by the ECI JV during the development of the supplement to the EIS. We note that no significant changes have occurred to this register included with the Draft EIS. The revised commitments register has been provided in Volume 4 Attachment I Additional Management Plans and Commitments Register.

4.15 Additional information air and greenhouse gas

Based on the Project activities and the consumption of GHG emitting fuels estimated by the ECI JV, the expected Green House Gas emissions have been updated since the publication of the Draft EIS. It is now expected that the emissions will decrease by approximately 45% due to the reduction in land clearing. The expected total amount of permanent disturbance for the Project is now 1994 ha. This is approximately half of what was anticipated in the 2020 Draft EIS. The consumption of fuels for the Project is expected to increase in most instances due to the Project design, however this is offset by the reduction in clearing. Greenhouse gases are estimated to be approximately 250.940 tCO2 for construction.

Table 4-16 Green house gas emissions calculations for EIS and EIS supplement

	Draft EIS 2020		EIS Supplement 2021	
GHG Emitter	**Consumption / Clearing Amount**	**tCO_2**	**Consumption / Clearing Amount**	**tCO_2**
Land Clearing (ha)	4,081	431,293	1,994	210,732
Diesel Stationary (kL)	2,800	7,587	5,200	14,153
Deisel Mobile (kL)	4,200	11,413	11,000	23,939
Aviation Fuel (kL)	1,259	2,843	845	2,014
Electricity Consumption (kW)	12,6000	102	126000	102
	Total tCO_2 Consumption	**453, 238**	**Total tCO_2 Consumption**	**250, 940**

There was an error in the original Greenhouse gas calculation for operation. The energy transmitted during operation was estimated as 15,768,000 GWh and the total energy should be 157,680 GWh.

Greenhouse gas assessment has been completed in accordance with the Project Terms of Reference. Our greenhouse gas emissions have been updated in line with the current concept design and ECI JV estimates of materials.

4.16 Additional information legislation and approvals

Following the announcement and incorporation of an ECI JV into the Project, CuString made some minor amendments to the proposed development since the draft EIS. More work has been done to confirm the preferred approvals pathway for the project as well as the potential for secondary approvals requiring further assessment post the EIS process. These further details have been outlined in the following sections.

Legislation and approvals strategy

- Provide updated version of the legislation and approvals chapter of the draft EIS to clarify the preferred approvals pathway(s) and alternative pathway(s) for the project following conclusion of the Coordinator-General evaluation of the EIS. This should include identification of where conditions or recommendations are sought as an outcome of a Coordinator-General's evaluation.

4.16.1 Preferred approvals pathway

The Project's approval pathway will involve an assessment of the CopperString 2.0 EIS under the Queensland State Development and Public Works Organisation Act 1971 (SDPWO Act) and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) under the bilateral agreement between the Queensland and Commonwealth Governments.

The project will then proceed through a Ministerial Infrastructure Designation Process to obtain all approvals also assessable under the Planning Regulation 2017. This process will progress in a staged format in accordance with land access and signed easement option agreements with individual landholders. Further information regarding the approvals and types of conditions expected to be sought as part of the EIS process under the SDPWO Act and within the Coordinator-General's evaluation report are outlined in Table 4-17.

Table 4-17 Approvals and draft conditions

Commonwealth government approvals	
Controlled action	Approval of controlled action (EPBC 2017/8078) Relevant controlling provisions triggered under the EPBC Act are sections 18 and 18A, listed threatened species and communities. Direct or indirect significant impacts to MNES.
Commonwealth Conditions	
Aspect	**Proponent Comment / Draft Condition**
Action	The proponent must comply with all Conditions issued by the Commonwealth Minister for the Environment in any approval for the project under the *Environmental Protection and Biodiversity Conservation Act 1999* This approval should include maximum disturbance limits to conservation significant species.
Offsets	The proponent must finalise the draft Biodiversity Offset Management Plan prepared for the Project to cover unavoidable significant residual impacts to listed threatened species.
State government approvals	
Coordinated Project Approval	Approval of Coordinated Project CopperString 2.0 The proponent must comply with all the Coordnator-General's stated condition under section 39(1)(a) of the SDPWO Act. For elements to be designated under a Ministerial Infrastructure Designation, the stated conditions in this section are recommended requirements for the designation in accordance with section 43 of the SDPWO Act.
Stated Conditions	
Aspect	**Proponent Comment / Draft Condition**
Works associated with the construction activities	Prepare a site based environmental management plan prior to commencement of construction early works. This plan must include: • measure to minimise impacts to grazing activities • control vegetation clearing and impacts to conservation significant specie with approved disturbance limits • pre-clearing weed surveys • erosion and sediment control measures biosecurity procedures
Compliance and Auditing	The holder of this approval must (within 3 months of the commencement of the approved activities), obtain from an independent third party a certified report on compliance with the conditions of this approval obtain further such reports at regular intervals, not exceeding 6 monthly intervals during construction. The holder of this approval must provide an annual Update Report detailing activities during the previous 12 months to the administering authority detailing:

	• significant disturbance undertaken • rehabilitation undertaken results and interpretation of any environmental monitoring
General (EP Act)	All plant and equipment must be maintained and operated in proper condition and measures implemented during construction and operation activities to prevent fauna being harmed from entrapment.
Environmental Nuisance (EP Act)	Activities must not cause environmental nuisance at any nuisance sensitive place unless specifically authorised by a condition of this approval or where an alternative arrangement is in place.
Rehabilitation	Within 6 months after completion of an activity (unless otherwise approved), the holder of approval must commence reinstatement of temporarily disturbed areas that is: • a stable landform • re-profiled to a level consistent with surrounding soils. After decommissioning, all significantly disturbed land caused by the carrying out of the activity(ies) must be rehabilitated to meet the following final acceptance criteria: • any contaminated land (e.g. contaminated soil) is remediated and rehabilitated • groundcover, that is not a declared pest species is established and self-sustaining Performance indicators must be monitored on rehabilitation activities until conditions have been met for rehabilitated areas.
Water Quality (EP Act)	Contaminants must not be directly or indirectly released to waters unless authorised by a specific condition of this approval.
Recommendations Conditions	
Aspect	**Proponent Comments / Draft Condition**
Ballara Nature Refuge	The project is to be constructed within the Ballara Nature Refuge and revocation of land or amendment to the Conservation Agreement for Ballara Nature Refuge be generally in accordance with the approved corridor selection.
Offsets	Where significant residual impacts to MSES are not covered by MNES obligations under the *Environmental Protection and Biodiversity Conservation Act 1999,* a Biodiversity Offset Management Plan be prepared for all MSES being impacted by the Project. This may include; • least concern REs associated with watercourses • essential habitat for fauna • loss of protected area (including Ballara Nature Refuge) At this stage, it is generally proposed that environmental offsets for the significant residual impacts to MSES would be delivered through the provision of a land-based offset and collocated with MNES offset where possible. To avoid duplication, land-based offset must be capable of delivering a conservation outcome for the impacted MSES in accordance with the Queensland Environmental Offsets Policy. The quantum of MSES requiring offsets has yet to be fully determined and it is expected that these offset requirements will be determined during the subsequent secondary approval phase via approval under the Vegetation Management Act 1999 or Queensland Ministerial Infrastructure Designation. MSES offset requirements are also determined by whether works are undertaken by an electricity entity as such works are exempt clearing activities under the Queensland Electricity Act 1994.
Traffic and Transport	CuString are continuing to address road and rail network impacts with TMR as further construction planning is completed. At this stage, CuString is satisfied with the draft conditions TMR has provided within their written submission. The key aspects to be conditioned involve the following: • Earthworks Adjacent to Railway Corridor • Stormwater and Flooding Management • Fencing • Dangerous Goods

	• Railway Level Crossing Safety • Construction Management • Railway Noise (construction camps) Design and Construction in proximity to railway (Collision protection)
MID application	The proponent must, as part of the Ministerial Designation Process, ensure the lodgement material includes reference to the conditions, recommendations and Proponent Commitments of this EIS. The proponent must, as part of the Ministerial Designation Process, ensure that the current versions of State development assessment provisions and/or vegetation mapping are used and referred to in any subsequent development application.
Species Management Plan	Prior to the commencement of construction, the proponent must determine all species requiring a high-risk Species Management Program. Once all species are confirmed the proponent must undertake additional all required additional field work to information a SMP. Lodge for approval from DES all required SMPs.
Fisheries Waterways	Where possible crossings of waterways will utilise existing crossings. Any works within the bed and banks of a waterway constitutes waterway barrier works and requires authority either under the Accepted development requirements or through a development approval. Vehicle crossing for the project will aim to meet the requirements for bed level crossings within the Accepted development requirements for operational work that is constructing or raising waterway barrier works. Any waterway crossings that cannot meet the specifications within the ADR will require a development approval.
Forestry Products	The Project may impact on state-owned forest products and quarry material under the Forestry Act. In addition to the requirement for an authority for using state-owned quarry material or forest products, an authority may be needed to alienate or disturb the same. The Proponent will contact DAF Forestry to finalise any required approvals or compensation upfront and to provide adequate time for the extraction of state-owned quarry material and/or forest products where required.
Water	Where existing licenced bores are proposed for use under the Project, consultation will be required with the Department of Regional Development, Manufacturing and Water to determine whether the purpose and conditions of the water licence allow the taking of water for the proposed purpose. A seasonal water assignment notice or water permit will be obtained under the Water Act 2000 where required to authorise the taking of underground water. Where new or temporary mobile batching plants are proposed, the water source will be determined in consultation with local councils and the Department of Regional Development, Manufacturing and Water (DRDMW). To authorise the taking of water for new or temporary mobile batching plants, a seasonal water assignment notice or water permit will be obtained under the Water Act 2000 where existing town water supplies are unavailable to meet project demand. Approvals under the *Water Act 2000* and/or *Planning Act 2016* will be obtained where required prior to taking any water and prior to constructing any new bores.
Stock Route Management	The proponent must document and implement management measures for gazetted stock routes impacted by the project that: (i) provide safe passage across the easement for stock, personnel and the general public. (ii) maintain stock routes in accordance with any arrangement reached with landholders, the relevant LGA or the administering authority including any re-aligned stock routes.
Landholder Agreements	All landholder engagement associated with land access negotiations must be conducted in accordance with the Land Access Strategy (Vol 3, Appendix E)

4.16.2 Infrastructure Designation Process

On the basis that the Project is given EIS approval to proceed, CuString will seek a Ministerial Infrastructure Designation (MID) under the provisions of the Planning Act 2016 and in accordance with chapter 7 of the Minister's guidelines and rules under the Planning Act 2016.

As per discussion with the State Government, the Infrastructure Designation (ID) Process is considered the most appropriate secondary approval pathway due to the long linear nature of the project and simplification of approval requirements spanning multiple local government areas.

All development permits assessable under the Planning Regulation 2017. Other specific approvals/permits required under other legislation (i.e. *Nature Conservation Act* 1992 – Clearing of protected pants) will be obtained separately.

Components of the MID Process include the following:

- Consultation plan specifically for each individual MID proposal covering local councils, state agencies and all impacted property owners which would include notification letters, newspaper advertisements and coordinated engagement meetings.
- Evidence of 'ownership' or option agreement to the use of the land.
- Acquisition Plans - define land requirements to be designated on a lot by lot basis.
- Preliminary design Tower siting, Substation / CEV Huts / Camps / Laydown site to enable an agency level assessment consistent with requirements (DSDILGP, DES, DR, TMR).
- Clearing of REs – PVMP (consistent with Op Works)
- Traffic and Transport including access point intersection or road upgrades etc - RUMP, RIAR, TIA (per EIS Conditions per activity).
- Site specific investigations and plans including SMP, TIA, Flooding, Civil earthworks, as would be expected as part of a DA level assessment.
- Planning assessment report.

It is expected that the MID process will be broken into various MID proposals generally in accordance with the proposed nine construction hubs. The final configuration of MID proposals will be developed in consultation with the DSDILGP and Planning Minister.

4.16.3 State Code 16

Since the Draft EIS was completed, a review of the project responses to State Code 16 has been undertaken. Changes to code responses have been provided within Section 4.4 and response to the performance criteria and acceptable solution has been outlined in Table 4-10.

4.16.4 Revised secondary approval information

At this stage, the proponent does not have access to survey and investigate all properties within the proposed 1,000km project activities. In addition, the design of infrastructure is at a concept level and elements are expected to vary in accordance with further design optimisation. While this status is sufficient to quantify likely impacts to MNES and MSES and assist state agencies in understanding risks in accordance with the Project Terms of Reference, it has prevented the preparation of materials suitable to obtain development permits for assessable development as part of the EIS process.

Further information regarding the development permits that will be required prior to commencement of construction that cannot be obtained as part of the EIs process is outlined below.

- Operational Work – Vegetation clearing under the Vegetation Management Act 1999

Where clearing of cannot be conducted in accordance Planning Regulation 2017 Schedule 21, Part 1, (10 (a) and (b)) or if included within the ID Process. This would apply broadly across the entire project.

- Operational works for constructing waterway barrier works under Fisheries Act 1994

  Where works cannot comply with the Accepted development requirements for operational work that is constructing or raising waterway barrier works. This would apply at purple waterways where new temporary vehicle crossing are required. Additional information which identifies the Major Risk DAF waterways where construction work is unavoidable has been provided in Volume 4 Attachment F Additional Information Flora and Fauna – Waterway Assessment.

- Protected plant clearing permit or Exempt clearing notification Nature Conservation Act 1992

  Where clearing areas identified as being within the high-risk flora survey trigger areas for protected plants or where protected plants have been detected, a flora survey must be undertaken in accordance with the guideline and a clearing permit or exemption notice obtained. Protected Plant trigger areas are located south of Charters Towers and south Cloncurry.

- Riverine Protection Permit (RPP) under Water Act 2000

  A RPP is required to excavate, place fill or destroy vegetation in a watercourse, lake or spring unless such works are otherwise authorised or exempt in accordance with Planning Regulation 2017 Schedule 21. The project will require bed level crossings through watercourses under the Water Act. CuString and the ECI JV will engage with the Department of Resources to either obtain permits or seek approval as an entity.

- Water licence allocation under Water Act 2000

  The ECI JV has undertaken some investigations to identify construction water supply sites need for construction. The water demands will vary during the final design optimization process particularly regarding tower footing designs. ECI JV will engage with the Department of Resources to either obtain water licenses or if they intend to seek permission to utilise an existing license or permit under the Water Act. Individual water sources cannot be identified at this time.

- Environmentally Relevant Activities under the Environmental Protection Act 1994

  The ECI JV has undertaken some investigations to identify construction water supply sites need for construction. The water demands will vary during the final design optimization process particularly regarding tower footing designs. ECI JV will engage with the Department of Resources to either obtain water licenses or if they intend to seek permission to utilise an existing license or permit under the Water Act. Individual water sources cannot be identified at this time.

Legislation and approvals strategy

- In this updated chapter, specifically clarify:
  - whether the project proposes to connect to local government sewage treatment facilities and if not, whether proposed systems would require an ERA 63. If detail cannot be provided on the requirement for an ERA 63, provide an assessment of the sewage treatment approval requirements and identify information necessary to apply for approvals under the *Environmental Protection Act 1994*
  - the relevance of both the *Airspace Act 2007* and the *Civil Aviation Act 1988* to the project, particularly the use of helicopters during construction activities. The *Civil Aviation Act 1988* was not discussed in detail in the draft EIS (only in summary table).

The temporary construction camps may need to establish on-site sewage treatment where a suitable connection to local government sewage treatment facilities is not achievable. The Project is not seeking approval for ERA 63 associated with construction camps as part of the EIS process. The ECI JV is still investigating options for camp location which includes negotiations with local councils and landholders regarding servicing. No further information is available at this time. If required, an approval will be obtained as part of the MID process.

As the corridor selection no longer connects to Cannington Mine, impacts to aviation particular those associated with the Trepell airport are no longer relevant to the project.

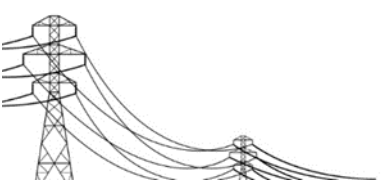
5 Editorial corrections

Corrections and consistency

- Address and correct comments/corrections made by advisory agencies in the relevant chapters including items relating to project details, project approvals, legislation, government policies, department names etc.
- Ensure cross-referencing across documents is specific and consistent.

EIS Chapter and Section	Editorial Corrections and Explanation
Volume 2, Chapter 1, Introduction, pg. 20, Table 1-1	Table updated (strikethrough removed, **bold added**) <table><tr><td>Legislation</td><td>Project phase</td><td>Relevant activity</td></tr><tr><td>Operational Work/**Material Change of Use** – Vegetation clearing *Vegetation Management Act 1999* (VM Act) ***Planning Act 2016***.</td><td>Pre-construction</td><td>~~Vegetation clearing (if not exempt)~~ **Clearing for the development must be determined to be for a Relevant Purpose under the VM Act before any authorising activity under the *Planning Act 2016* may be lodged.**</td></tr></table>
Volume 2, Chapter 4 Legislation and Approvals Section 4.2.3, Pg. 8	The following amendment to the text has been made: *'…the EIS is to include sufficient information to address all aspects required by the ~~Environmental Assessment Report~~ Ministerial Infrastructure Designation proposal highlighting environmental values, potential impacts and mitigation measures'.*
Volume 2, Chapter 4 Legislation and Approvals	Any reference to the Department of Mines, Natural Resources and Energy (DMNRE) is replaced with Department of Resources in relation to the administration of the Vegetation Management Act 1999.
Volume 2, Chapter 20 Cumulative Impacts Section 20.4.1, pg.16	(Flora and Fauna (including matters of national environmental significance). A minor typographical error in the name of the Vegetation Management Act 1999 is corrected to Vegetation Management Act 1999.
Volume 2, Appendix T Concept Rehabilitation Plan	The correct reference to pre-clear mapping is: The following mapping was used: Pre-clearance vegetation mapping used the current Department of Resources – Vegetation management pre-clear regional ecosystem map (version 11.0) and the Vegetation Management Regional Ecosystem and Remnant Map spatial layer (version 11.0).
All Chapters	References have been throughout made to specific versions of the State Development Assessment Provisions (SDAP), Regulated Vegetation

EIS Chapter and Section	Editorial Corrections and Explanation
	Management Map, Vegetation Management Regional Ecosystem Map, Vegetation Management Essential Habitat Map, Vegetation Management Wetlands Map and/or Vegetation Management Watercourse and Drainage Feature Map. Wording updated to acknowledge that the application will be assessed against the State Development Assessment Provisions and vegetation mapping that apply at the time of lodgment.
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.4.1, pg.54	Under the heading Riverine materials, the draft EIS states that aggregate riverine materials is not considered under the Project. This wording is potentially inconsistent with information provided in Volume 2, Chapter 4, 4.5.12 where the potential for a quarry material allocation notice is discussed. Wording is updated to be consistent with that described in Volume 2, Chapter 4, 4.5.12
Volume 2, Appendix L Regulatory Approvals Plan Section 1.3, pg.13 & 20	Amend wording: Change 'water license allocation' to water authorisation
Volume 2, Chapter 4 Legislation and Approvals, p.g., 14, section 4.5.1	Amend text (**bold added**): • Water Act 2000 (Water Act) – Riverine protection permit, **quarry material allocation notice, water permit and/or seasonal water assignment notice**
Volume2, Chapter 4, Section 4.5.12, p.g. 28-29	Amend text to reflect updated project description (**bold added**): No new groundwater bores are proposed as part of the Project. **Where existing licensed bores are proposed for use, consultation will be undertaken with the Department of Regional Development, Manufacturing and Water to determine whether the purpose and conditions of the water license allow the taking of water for the proposed purpose.**
Volume 2, Chapter 4 Legislation and Approvals, Section 4.5.1, p.g. 14	Amend text (**added bold**): The activities associated with the Project are subject to development assessment under the Planning Act; assessable development is likely to include a MCU under the relevant local planning schemes (code or impact assessable), building works, reconfiguration of a lot and operational works including excavating or filling that materially affects a premise or its use (bulk earthworks, road works), **constructions or installations for taking/interfering with water, removing quarry material,** and clearing vegetation.
Volume 2, Chapter 4 Legislation and Approvals, Section 4.5.12 pg.27	States the potential for a quarry material allocation notice to be required, which should reflect where possible approvals are detailed in the EIS.
Volume 2, Chapter 9 Water Resources and Water Quality section 9.3.2, pg. 54, Table 9-4	Water volumes in Table 9-4 to be updated as follows:

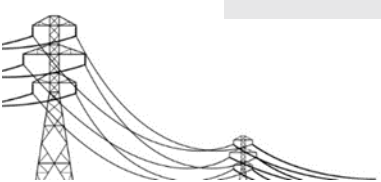


EIS Chapter and Section	Editorial Corrections and Explanation
	<table><tr><th>Basin</th><th>Supplemented surface water (ML)</th><th>Unsupplemented Surface Water (ML)</th></tr><tr><td>Burdekin WP – Burdekin Basin (120) & Haughton Basin (119)</td><td>1,104,829</td><td>216,757.8</td></tr><tr><td>Cooper Creek Basin (003)</td><td>0</td><td>18,033.9</td></tr><tr><td>Gulf WP – Staaten Basin (918), Gilbert (917), Norman (916), Flinders (915), Leichhardt (913), Morning (914), Nicholson (912), Settlement (910)</td><td>75,150</td><td>281,177.4</td></tr><tr><td>Georgina & Diamantina WP – Georgina (001), Diamantina (002), Hay (007),</td><td>0</td><td>6,108</td></tr></table>
Volume 2, Chapter 9 Water Resources and Water Quality section 9.4.1, pg. 54,	Text amended to become consistent with Volume 2 Chapter 4, Section 4.5.12 (strike through deleted, **bold added**): Aggregate required for the concrete batching process and other general construction activities would be supplied from the local regions from existing authorised suppliers. The final source of these materials will be subject to further discussions with key stakeholders, including Councils and quarry operators. Sand and aggregate for the Hughenden, Richmond and Julia Creek area (black soil areas) may need to be drawn from the Charters Towers/Pentland or Cloncurry areas. ~~New sources of aggregate from water features (i.e. riverine material) is not considered under the Project.~~ No material is proposed to be removed from a watercourse for construction of the Project. If material is sourced from a watercourse for construction, in addition to requiring approval under the Planning Act, a quarry material allocation notice under the Water Act will need to be applied for and granted prior to the material being sourced. If required, an application to DNRME and/or DAF outlining the type and quantity of material to be extracted, the intended purpose, length of time required, and a report will be required.
Volume 2, Chapter 9 Water Resources and Water Quality, p.g. 57, section 9.4.1	Amend existing text (**bold added**): Where access to Council supply is not possible or feasible due to remote locations of camps or construction activities, **consultation with landholders and the Department of Regional Development, Manufacturing and Water will be undertaken and, where required, additional approval under the Water Act 2000 obtained in order to utilise** existing bores. This would ensure that volumes and quality of groundwater are maintained and current lawful users of water (such as entitlement holders and stock and domestic users) and other beneficial uses of water (such as spring flows and groundwater-dependent ecosystems) are not adversely impacted by the project.”
All Chapters	Any references to The Water Act 2000 are now updated to acknowledge that it is regulated and administered by the Department of Regional Development, Manufacturing and Water.

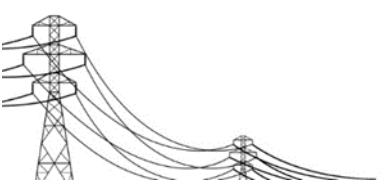
EIS Chapter and Section	Editorial Corrections and Explanation
Volume 2, Chapter 4 Legislation and Approvals, Section 4.5.7, pg. 20	The corridor selection traverses a number of waterways (94 Major or High Risk waterways and **multiple moderate and low risk waterways**) that are mapped on the Queensland Waterways for Waterway Barrier Works spatial layer, as waterways where fish habitats are at risk of impact from waterway barrier works. During the construction phase of the Project, existing waterway crossings will be utilised where practicable. Where temporary crossings are required, the Project will be required to meet the Accepted development requirements for operational work that is constructing or raising waterway barrier works 2018. Where the works are undertaken in accordance with the Accepted development requirements for operational work that is constructing or raising waterway barrier works 2018, then an operational works development permit for constructing or raising waterway barrier works is not required (refer to Volume 2 Chapter 9 Water resources and water quality). **Other than access tracks and temporary crossings**, there are no components of the Project that are defined as waterway barrier works.~~, as~~ Towers, C**EV huts, substations, laydown areas, stockpile and storage areas, temporary camps, accommodation, fly yards and any other ancillary infrastructure that does not have functional requirement to be within a waterway** will not be constructed within any waterways. In addition, conductors and earth wire pull cables will be strung over the waterways using helicopters to avoid riparian impacts. Vehicle access across waterways is likely be in the form of a bed level crossings which can be established in accordance with the accepted development requirements. New bed level waterway crossings will be constructed within timeframes **and all other design requirements, general standards and notification** as specified by the Accepted development requirements for operation work that is constructing or raising waterway barrier works (DAF, 2018) (i.e. within 180 days for major impact (purple) or high impact (red) waterways, or 360 days on moderate impact (amber) or low impact (green) waterways). As such, assessable waterway barrier works **are not likely to** apply to this project. **Any waterway crossings that cannot comply with the Accepted Development requirements will be assessable development and pre-lodgement advice and a development application is to be sought through the State Assessment and Referral Agency (SARA) before works at that location begins.** The DAF will be consulted should quarry material extraction be required that has the potential to impact on fish movement. The Project will not require the removal of marine plants during the construction of waterway crossings as it is not located within a coastal area.
Volume 2, Chapter 4 Legislation and Approvals Section 4.5.7, pg.20	Remove references to the Fisheries Regulation 1995 and replace with Fisheries (General) Regulation 2019.
Volume 2, Chapter 4 Legislation and Approvals Section 4.5.7, pg.20	Wording amended (strikethrough deleted, **bold added**) ~~The Planning Regulation assigns the Chief Executive administering the Fisheries Act as the assessment manager for fisheries development in certain situations~~ **The Planning Regulation assigns the Chief Executive (administering the Planning Regulation) as the assessment manager for fisheries development**
Volume 2, Chapter 4 Legislation and Approvals Section 4.6.5, pg.32	Amend text as follows: ~~The Project area intersects a number of parcels including state land and spoil material will be excavated during the establishment of the tower foundations, and the establishment of access tracks and other ancillary activities. However, the excavated material will remain in the Project area and will not be used for commercial purposes. It is yet to be determined if the project will disturb harvestable timber, therefore, a sales permit may be required for the Project~~.

EIS Chapter and Section	Editorial Corrections and Explanation
	The Project may impact on state-owned forest products and quarry material under the Forestry Act. In addition to the requirement for an authority for using state-owned quarry material or forest products, an authority may be needed to alienate or disturb the same. The Proponent will contact DAF Forestry to finalise any required approvals or compensation upfront and to provide adequate time for the extraction of state-owned quarry material and/or forest products where required.
Volume 2, Chapter 4 Legislation and Approvals Section 4.9.9, pg.75	Amend each relevant column in line with row for operational works that is constructing or raising waterway barrier works as follows **(in bold)**: "Approval Requirements" **Required. Where possible crossings of waterways will utilise existing crossings. Any works within the bed and banks of a waterway constitutes waterway barrier works and requires authority either under the Accepted development requirements or through a development approval. Vehicle crossing for the project will aim to meet the requirements for bed level crossings within the Accepted development requirements for operational work that is constructing or raising waterway barrier works.** **Any waterway crossings that cannot meet the specifications within the ADR will require a development approval.** "Trigger" **Operational works that is constructing or raising waterway barrier works**, will apply to specific locations during the construction phase where crossing waterways has the potential to create a barrier to fish passage. "Approving Authority" Department of Agriculture and Fisheries (DAF) **State Assessment and Referral Agency (SARA)** "Approval Timeframe" 4 months for a DA. **For Accepted Development:** Notification must be made prior to but no more than 20 business days before work commences and within 15 business days post-works.
Volume 2, Chapter 4 Legislation and Approvals Section 4.9.9, pg.75	Wording amended as follows in the rows of the table (deleted struck through, **inserted bold**): <u>Column 1 Approval / Relevant legislation</u> Quarry material / **Forest product** Permit Forestry Act 1959 <u>Column 3 Relevant Project Activities</u> ~~Removing material from State Land for use in construction or other commercial purpose~~ **Removing, alienating or disturbing state-owned quarry material or forest product**s <u>Column 4 Trigger</u> ~~Where material is proposed to be extracted from the ground on State Land for use in the construction of access tracks or other activities~~. **Removing, alienating or disturbing state-owned quarry material or forest products.** The requirement for material is to be determined. <u>Column 7 Approval Requirements</u> ~~Not Required Spoil material excavated during establishment of tower foundations will not be used for commercial purposes, but may be used to assist in directing stormwater flows around the infrastructure. Material will not leave site and Permit.~~ **Authorities under the Forestry Act may be required. The Proponent will contact DAF Forestry to finalise any required approvals or compensation upfront and to provide adequate time for the extraction of state-owned quarry material and/or forest products where required.**
Volume 2, Chapter 4 Legislation and Approvals	Remove references in the table to the Forestry act and Department of Agriculture and Fisheries and quarry materials:

EIS Chapter and Section	Editorial Corrections and Explanation
Section 4.9.9, pg.80, Table 4-7	Permit to take quarry material from a watercourse ~~Forestry Act 1959 Water Act 2000~~
Volume 2, Chapter 7 Flora and Fauna Section 7.4.1, pg. 219	Update wording from (strike through remove, **bold add**): ~~States tower location will eliminate the need for waterway barriers~~. **Towers will be strategically located to allow the corridor to span across watercourses. This will also eliminate the need for additional waterway barriers.**
Volume 2, Chapter 5 Land Section 5.4.11, Table 7-14,	Wording updated (strike through remove, **bold added**): Row 1 p236: The layout of temporary and permanent structures and infrastructure (including construction areas, site offices, stockpile, laydown areas, access tracks and construction camps) will be designed to minimise clearing of vegetation (in particular endangered, of concern and threshold REs), **and avoid waterways.** Row 5 p236: Towers will be strategically located to allow the corridor to span across **waterways,** watercourses and riparian vegetation. This will also eliminate the need for additional waterway barriers and reduce the likelihood of impacts to aquatic environment. No towers should be located within a **waterway,** watercourse or its riparian zone. Row 9 p236-2367: A Decommissioning and Rehabilitation Plan for areas to be temporarily disturbed during construction will be developed prior to construction commencing with the overall aim of minimising the amount of land disturbed at any one time during the construction of the Project. After cleared areas are no longer required (i.e. temporary construction camps, laydown areas, quarries, borrows, turning circles and access tracks), rehabilitation will commence in accordance with the Rehabilitation Plan. Temporary construction infrastructure will be decommissioned and removed from site. The sites will then be rehabilitated to a state generally consistent with the natural environment. The Decommissioning and Rehabilitation Plan will include: • Removal of potentially hazardous stored substances • Remediation of any contaminated areas • Grading of disturbed surface landscapes to a state generally consistent with a natural environment (if required) and to ensure that permanent drainage lines are not compromised • Application of topsoil and revegetation with native species. Revegetation would use flora species of local provenance that were present prior to clearing commencing and species specific to the RE cleared at that site • A mechanism for rehabilitation strategies to be refined throughout the life of the Project to implement methods which have been most reliable and successful • Requirements and mechanisms for post construction monitoring and audit of rehabilitation success. Material cleared during construction is planned to be chipped, mulched and stockpiled for reuse during rehabilitation. Materials with special habitat value, such as hollow bearing logs or trees, will be selectively removed for reuse during rehabilitation, or placed in nearby bushland. Any **waterway or** watercourse areas crossed will be restored and rehabilitated with measures to improve connectivity and provide enhancements to suitable habitat, where referenced in the Flora and Fauna Management Plan. The Decommissioning and Rehabilitation Plan will also outline specific objectives and methodology for the following: • Seed collection • Flora regeneration • Landscape architecture (i.e. topography) • Creation of supplementary habitats (e.g. nesting boxes), if necessary.



EIS Chapter and Section	Editorial Corrections and Explanation
	Row 20 p238: Where infrastructure must cross waterways, areas of existing disturbance (i.e. existing tracks or clearing) will be used **and crossings will be designed in accordance with the accepted development requirements for operational work that is constructing or raising waterway barrier works to reduce the impacts of potential barriers on fish passage, and other aquatic species.** Where ~~this is~~ **it is** not safe to ~~do so~~ **use existing tracks**, the Project activities will be minimised and large habitat trees retained. Waterway crossings in known habitat for conservation significant flora and fauna species will aim to avoid occurrences of flora species and span across the riparian habitat corridors wherever possible Row 22 p239: All site offices, construction stockpiles and laydown/storage areas will be located within existing cleared or disturbed areas **and outside of waterways,** as a priority. This will effectively reduce the extent of impacts to remnant vegetation and fauna habitats. Row 38, p.g. 240: Access tracks and bed-level crossings will be restricted to areas that are already disturbed to reduce the extend of required clearing and remove unnecessary disturbances to the natural environmental. **Where crossings intersect with waterways, they will be constructed in accordance with the accepted development requirements for operational work that is constructing or raising waterway barrier works to ensure they do not create barriers to fish passage during times of flow.** Row 46, p 241: Erosion and sediment control measures will be developed as part of the CEMP for the Project. The requirement of erosion and sediment controls will be assessed at all **waterways,** watercourses and drainage lines intersect**ed** by the project. Erosion and sediment control measures will be installed where disturbance must be undertaken within or adjacent to wetted waterways. Erosion matting (e.g. Jute mesh) or sediment socks (e.g. Sand-filled UV-resistant fabric tubes) will be used for earthwork activities where there is a risk of gulling or sedimentation of watercourses a**nd waterways. The accepted development requirements for operational work that is constructing or raising waterway barrier works will be used where sediment controls are installed within waterways.** Row 67 p242: Minimising vehicle access to waterways and exposed surfaces by establishing designated **and easily identifiable waterway and** watercourse crossings
Volume 2 Chapter 8 Biosecurity Section 8.3.1, pg.10 & section 8.3.2, pg.43	"dropping" tree pear changed to "drooping" tree pear
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.1.4, pg.2	Wording updated (**bold added**): Waterways: waterways include rivers, creeks, watercourses, **drainage features** or inlet of the sea defined under the Fisheries Act 1994 for the purpose of managing impacts on fish passage.
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.2.3, pg.5	Dot point on Fisheries Act 1994 amended as follows (strikethrough deleted, **bold added**): The Fisheries Act is the Queensland legislation that provides for the management, use, development and protection of fisheries resources and fish habitats in Queensland. ~~Approval must be sought under the act to construct or raise assessable waterway barriers on a waterway~~. **Works within waterways (waterway barrier works) must be authorised as per the Accepted Development Requirements for operational works that is constructing or raising waterway barrier works (ADR). Any waterway barrier work that does not meet the requirements of the ADR is assessable development and requires a Development Approval through the State Assessment and Referral Agency (SARA).**



EIS Chapter and Section	Editorial Corrections and Explanation
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.3.2 pgs. 5-6	Wording amended to include the following dot point in the list of legislation, policies and guidelines relevant to identifying values and to providing guidelines on mitigation and managing impacts on surface water: • Planning Act 2016
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.3.1, p.g.8	Amended wording in list of environmental value for surface water (**bold added**): Surface water: • Aquatic ecosystems – the majority of the watercourses would typically fall in the "slightly to moderately disturbed ecosystems" category. For slightly and moderately disturbed ecosystems the water quality objectives are to improve and maintain or improve (as required) respectively the existing water quality in the watercourse. • Primary industries – the majority of surface water is utilised for stock watering with crop and pasture irrigation on a small scale **and fisheries productivity**. While some of the water storages in the area are utilised for town water supply, the majority of water resources have a value in household consumption for farmhouses.
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.3.2, pg.14	Amended wording to acknowledge all waterways for waterway barrier works as follows (**bold added**): "The corridor selection traverses a number of waterways that are mapped as waterways for waterway barrier works. Table 9-5 presents the waterways mapped as high (red) and major risk (purple) under the waterway barrier works mapping. **The project will also cross multiple mapped amber and green waterways and potentially waterways that are not mapped. All waterway crossings including those not listed in the table below, will be constructed in accordance with the Accepted development requirements for operational works that is constructing or raising waterway barriers works (ADR). Where they cannot comply with the ADR a development approval will be sought.**
Volume 2, Chapter 9 Water Resources and Water Quality Section 9.3.7, pg.52	The following dot points are added/updated in the list of recommendations **(bold added):** The following key recommendations are made to avoid/minimise impact on water quality and water resources from Project infrastructure and activities: • Utilise existing access tracks wherever possible for access to the Project and when crossing waterways comply with DAF Accepted development requirements for operational work that is constructing or raising waterway barrier works **or relevant development approval.** • **Locate infrastructure that does not have a functional requirement to be in a waterway outside of the main channel.** • **Clearly identify access tracks to prevent multiple crossings and disturbance to bed and banks of waterways.**
Volume 2, Chapter 21 Environmental Offsets Section 21.2.3, Table 21-3, p.g. 28	Amend wording as follows (strike through deleted, **bold added**): The Project area is mapped to frequently cross four risk categories of waterways for waterway barrier works (low, moderate, high and major). **Regardless of the category, all waterways are MSES and provide vital habitat and connectivity for native fish during times of flow. Any delays in movement during this time can be detrimental to species locally and at a population level.** ~~However, almost all of these waterways are ephemeral and only flow during heavy rains or flood events. The middle section of the corridor selection, the CopperString Core, contains major ephemeral waterways that flow to the Gulf of Carpentaria, namely, the Flinders River, Fullarton River and Williams River. The remainder of the corridor selection contains mostly smaller, low to high level waterways. These lower level~~

EIS Chapter and Section	Editorial Corrections and Explanation
	~~creeks exist as tributaries to the major river systems, and are generally ephemeral.~~ **The project will require multiple waterway barrier works in the form of access tracks across waterways. These access tracks are likely to be able to be constructed in accordance with the Accepted development requirements for operational works that is constructing or raising waterway barrier works (ADR). Where crossings can comply with the design specifications within the ADR, it is unlikely that a significant residual impact will result, and offsets will not be applicable. Where any works within waterways cannot meet the ADR, a development approval will be required. Depending on the nature of the works, a significant residual impact may result and may require an offset. This will be assessed at the development application stage where applicable.** ~~It is unlikely that the Project will require waterway barrier works that would impact fish passage along a waterway, or require an authority to carry out waterway barrier works, therefore no offset requirements triggered.~~
Volume 2, Chapter 21, Section 21.4.2, pg58	Amend wording as follows (strike through deleted, **bold added**): Crossings of waterways during construction will utilise existing crossings. **Where new permanent or temporary crossings are required, they will constitute waterway barrier works and will** ~~and crossings will not be of a type that constitute waterway barrier works. During the construction phase of the Project will utilise existing waterway crossings and where a temporary crossing is required it will~~ be required to meet the Accepted development requirements for operational work that is constructing or raising waterway barrier works (DAF 2018). **Works that can comply with the ADR are unlikely to result in a significant residual impact and no offset would be required. Where works cannot comply with the ADR, a development approval will be required. Depending on the nature of the works, a significant residual impact may result and may require an offset. This will be assessed against State Code 18 at the development application stage where applicable.** ~~Therefore waterway crossings are unlikely to require development approval and address the State Code 18: Constructing or raising waterway barrier works in fish habitats, hence will not trigger offset requirements~~.
Volume 3, Appendix L Regulatory Approvals Plan Section 1.3.1, Table 1-2, pg. 9	Amend column wording as follows (**bold added**): "Approval" to include **operational works that is constructing or raising waterway barrier works, Fisheries Act 1994.** "Next Steps" to include **if works can comply with the Accepted development requirements for operational work that is constructing or raising waterway barrier works (ADR), notify DAF and comply with the requirements of the document. If works cannot comply with the ADR, seek pre-lodgement advice through the State Assessment and Referral Agency to determine requirements and approvals required for works within a waterway.** "Applicable Area" include **any works within waterways as defined by the Fisheries Act 1994**
Volume 3, Appendix L Regulatory Approvals Plan Section 1.3.1, Table 1-3, pg. 19	Amend column wording as follows (**bold added**): "Approval" to include **operational works that is constructing or raising waterway barrier works, Fisheries Act 1994.** "Next Steps" to include **if works can comply with the Accepted development requirements for operational work that is constructing or raising waterway barrier works (ADR), notify DAF and comply with the requirements of the document. If works cannot comply with the ADR, seek pre-lodgement advice through the State Assessment and Referral Agency to determine requirements and approvals required for works within a waterway.** "Applicable Area" include **any works within waterways as defined by the Fisheries Act 1994**

EIS Chapter and Section	Editorial Corrections and Explanation
Appendix T – Concept rehabilitation plan Section 3.15, pg. 13	Amend wording: Section 3.15 heading to be amended to read: Waterway and Watercourse Crossings (riparian habitat).
Volume 3, Appendix K Land Use and Tenure Section 4.12.3, Table 4-19 pg. 99	Amend wording in table to show ML100111 is in application phase.
Volume 4 – EIS Supplementary (Table 4-8 and 4-9) Attachment E - Revised Information MNES (Table 18-38, 18-39 and 18-42) Attachment G – Draft Biodiversity Management Strategy (Table 3-3).	References to "project activities" and "project area", have been updated and amended. They are now correctly referencing the correlating hectare values.

6 Additional clarification (Revised EIS)

This material has been prepared in response to the request for additional clarification sent to CopperString on 25 November 2021. The clarification items were requested following the circulation of the Draft EIS Vol 4 additional information (on the 13 October 2021) to stakeholders who made a submission on the Draft EIS. This response includes information and references to where updates have now been made to the Draft EIS Vol 4 additional information (Section 4 and 5). The combined Volumes 1-4 form the revised draft EIS for the Project. Text boxes have been used throughout this section to relate the items requested with the corresponding proponent response.

MNES / MSES

- Revised DEIS, Attachment E, Table 18-38, includes 'Transmission Line Clearing (below 1 m) Construction (line of sight)' as a temporary project activity. The disturbance type is explained as the clearing of all vegetation to ground level within a 6m wide corridor between towers along the centreline of the alignment for wire stringing between the towers.

  It is understood from the draft EIS and revised draft EIS material that the only circumstance where line of sight clearing would not be required is where transmission line infrastructure can be placed in cleared areas. Please provide further detail on the purpose of line of sight clearing (i.e., placement of wires prior to stringing) and where line of sight clearing would and would not be required/utilised.

The 6 m width for 'Transmission Line Clearing (below 1 m) Construction (line of sight) clearing is required to conduct the stringing by helicopter, which is the basis of the stringing construction methodology. The clearing is also required for energisation due to the distance between towers and the cable sagging to allow for movement with wind etc without the cables hitting adjacent vegetation, as per the energisation clearing plan. The line of sight clearing runs parallel with the 6m wide construction access track. This 12m wide zone positioned (predominantly) below the overhead wires also helps to minimise future growth of vegetation underneath the lines and thus reducing the bush fire risk and the consequential damage to the towers and lines by reducing nearby fuel sources.

MNES / MSES

- Following Question 1, please provide a specific discussion on the extent of line of sight clearing within riparian corridors (i.e., will a 6m wide corridor be cleared to ground cover within these areas?).

The line of sight clearing will be required within all riparian corridors intersecting with the alignment. This is required to conduct the stringing by helicopter, required for energisation due to cable sagging to allow for movement with wind etc without the cables hitting adjacent vegetation, and to minimise future growth of vegetation underneath the lines and reducing bush fire risk, as discussed above. Disturbances within riparian areas will be further investigated and planned during the detailed design phase in order to achieve compliance with project commitments that includes C14, C62, C75, C76 (refer to EIS Vol4, Attachment I Commitments Register).

MNES / MSES

- Please review and update the revised DEIS material to ensure 'project activities' (disturbance footprint for activities) and 'project area' (easement corridor) are correctly referenced. For example, Table 4-7 in the Supplementary EIS refers to mapped habitat intersected by 'project activities' however the same information presented in Table 18-39 of Chapter 18 refers to mapped habitat intersected by 'project area'.

Refer to response to issue 14.20 of CopperString Proponent response included in table 1.2 (refer to EIS Vol4, Attachment A Response to Submissions) and proponent response spreadsheet. All revised DEIS Vol 4 attachments have been amended and updated accordingly (refer EIS Vol 4 Attachment E, Species Impact Assessment Tables, Attachment G and Supplementary EIS).

MNES / MSES

- Species Impact Assessment Table – there are several instances where a project activity is predicted to disturb 0.00ha of habitat for a species yet has been identified as a residual impact (refer to Northern Leaf Nose Bat example below). Please clarify to provide consistency.

  Northern leaf Nosed Bat – Substation and CEV Huts (permanent activities) expected to disturb 0.00ha of habitat within the *Low open woodland with spinifex or other grasses (eucalypt or acacia dominated)* are flagged as residual impact.

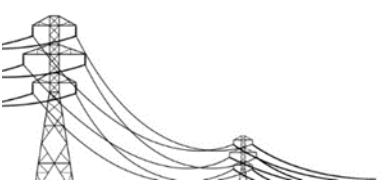
  Note: This comment aligns with both DAWE and DES comments on the revised DEIS, which identify concerns with the lack of clarity on how the residual impact hectare amounts were determined and why the other areas were excluded.

Species Impact Assessment Table have been amended and updated (refer EIS Vol 4 Attachment E, Species Impact Assessment Tables). The project activity that reflects a predicted disturbance area of 0.00 ha of species habitat identified as residual impacts are now amended to n/a (not applicable).

MNES / MSES

- Several discrepancies in disturbance limits and subsequent residual impacts have been identified across the revised DEIS documents (Attachment E, Species Impact Assessment Table, Supplementary EIS). Please update the revised DEIS to ensure consistency across the documents.

Refer to response to issue 14.20 of CopperString Proponent response included in table 1.2 (refer to EIS Vol4, Attachment A Response to Submissions) and proponent response spreadsheet. All DEIS Vol 4 attachments (refer EIS Vol 4 Attachment E, Species Impact Assessment Tables, Attachment G and Supplementary EIS) have been amended and updated to reflect the true disturbance limits and subsequent residual impacts due to the project activities within the species: Koala, Red Goshawk and the Night Parrot.



Ballara Nature Refuge MSES

- Quantification of MSES values contained within 193 ha impact area of Ballara – while these have been quantified as a part of impact areas along the project, we would like a clear list of impact areas on MSES values within Ballara.

  Updated volume 4 to include discussion of why alignment from south of Mt Isa not pursued with changes to the southern spur (as provided in spreadsheet response). Suggest within section 4.1 would be appropriate.

Table 6-1 includes a breakdown of all mapped Matters of State Environmental Significance within the corridor section that traverses the Ballara Nature Refuge.

Section 4.1.1 of this report includes a discussion of the key factors considered as part of the corridor selection process regarding an alternative alignment route from Mt Isa south along the train line to Phosphate Hill. It was not selected as the preferred alignment for a range of reasons (Refer to response to issue 14.12 of EIS Vol4, Attachment A Response to Submissions).

Table 6-1 Mapped MSES within Ballara Nature Refuge

Matters of State Environmental Significance (MSES)	Total area of mapped habitat intersected by the project footprint (ha) *	Residual Impact area (ha) **	Significant Residual Impact area (ha) ***
Regulated Vegetation			
Remnant Endangered			
n/a	0.00	0.00	0.00
Remnant Of Concern			
1.11.2a/1.11.7	0.00	0.09	0.05
1.11.2a/1.11.8/1.11.7	1.77	0.31	0.17
1.5.3/1.5.4d/1.11.7	1.21	0.23	0.06
Total Of Concern mapped	**2.97**	**0.64**	**0.28**
Remnant Least Concern			
1.11.11/1.5.4d/1.11.2a	0.00	0.15	0.07
1.11.2a	3.43	0.56	0.26
1.11.2a/1.11.11	10.74	1.71	0.85
1.11.2a/1.11.3a	25.84	4.57	2.15
1.11.2a/1.11.8	7.28	0.98	0.45
1.11.2a/1.5.3/1.3.13a	8.99	1.54	0.55
1.11.2a/1.5.3/1.5.4d	4.93	0.78	0.36
1.11.2a/1.5.4d	0.51	0.10	0.02
1.11.2a/1.7.7a	4.45	0.71	0.34
1.11.3a	0.18	0.00	0.00
1.11.3a/1.11.2a	32.93	5.53	2.23
1.11.3a/1.5.4d/1.3.13a	1.49	0.21	0.14
1.3.13a	2.16	0.41	0.11
1.3.13a/1.3.6a/1.3.7b	5.67	0.90	0.38
1.3.13a/1.3.7a/1.3.6a	2.94	0.26	0.04
1.3.13a/1.3.7b	0.00	0.11	0.06
1.3.13a/1.3.7b/1.3.6a	2.79	0.80	0.29
1.3.7b	0.88	0.16	0.04

Matters of State Environmental Significance (MSES)	Total area of mapped habitat intersected by the project footprint (ha) *	Residual Impact area (ha) **	Significant Residual Impact area (ha) ***
1.5.3/1.11.2a/1.5.4d	5.94	1.12	0.38
1.5.3/1.3.4b/1.5.16	22.97	3.94	1.58
1.5.4d	4.84	0.78	0.29
1.5.4d/1.11.2a/1.3.13a	3.89	0.67	0.25
1.5.4d/1.11.3a	4.83	0.89	0.39
1.5.4d/1.11.3a/1.5.16	9.34	1.39	0.64
1.5.4d/1.3.13a	6.88	1.15	0.45
1.5.4d/1.3.4a	9.73	1.71	0.69
1.5.4d/1.5.3/1.5.16	4.93	0.85	0.29
Total Least Concern mapped	**188.55**	**31.97**	**13.32**
Total Regulated Vegetation	**191.52**	**32.61**	**13.60**
Regulated Vegetation that is High Value Regrowth (HVR)			
n/a	0.00	0.00	0.00
Regulated Vegetation that is Essential Habitat			
n/a	0.00	0.00	0.00
Regulated Vegetation Within a Defined Distance of a Watercourse			
Remnant Of Concern			
n/a	0.00	0.00	0.00
Remnant Least Concern			
1.11.2a/1.11.11	0.86	0.19	0.05
1.11.2a/1.11.3a	0.45	0.06	0.01
1.11.2a/1.5.3/1.3.13a	0.44	0.10	0.03
1.11.2a/1.5.3/1.5.4d	1.14	0.12	0.06
1.11.3a/1.11.2a	1.08	0.21	0.05
1.3.13a	0.60	0.11	0.03
1.5.3/1.11.2a/1.5.4d	1.74	0.26	0.12
1.5.3/1.3.4b/1.5.16	1.37	0.27	0.07
1.5.4d/1.11.2a/1.3.13a	0.27	0.05	0.01
1.5.4d/1.11.3a	0.01	0.00	0.00
1.5.4d/1.11.3a/1.5.16	0.22	0.04	0.01
1.5.4d/1.3.4a	1.64	0.34	0.10
Total Non-coastal Stream Order 1 mapped	9.83	1.74	0.53
1.11.2a/1.5.3/1.5.4d	0.52	0.09	0.03
1.11.3a/1.5.4d/1.3.13a	0.02	0.00	0.00
1.3.13a	0.47	0.10	0.03
1.3.13a/1.3.7a/1.3.6a	0.16	0.00	0.00
1.3.7b	0.23	0.04	0.01
1.5.3/1.11.2a/1.5.4d	0.46	0.05	0.00
1.5.3/1.3.4b/1.5.16	3.14	0.52	0.11
1.5.4d/1.11.3a/1.5.16	0.13	0.00	0.00
1.5.4d/1.3.13a	0.06	0.01	0.00
1.5.4d/1.3.4a	2.25	0.28	0.07
Total Non-coastal Stream Order 2 mapped	7.43	1.09	0.25

Matters of State Environmental Significance (MSES)	Total area of mapped habitat intersected by the project footprint (ha) *	Residual Impact area (ha) **	Significant Residual Impact area (ha) ***
Total Non-coastal Stream Order 1 or 2 – 25m	**17.26**	**2.83**	**0.78**
1.3.13a/1.3.7b/1.3.6a	0.61	0.05	0.00
Total Non-coastal Stream Order 3 mapped	0.61	0.05	0.00
1.3.13a/1.3.7b/1.3.6a	0.55	0.05	0.00
Total Non-coastal Stream Order 4 mapped	0.55	0.05	0.00
Total Non-coastal Stream Order 3 or 4 – 50m	**1.16**	**0.10**	**0.00**
1.3.13a/1.3.6a/1.3.7b	0.63	0.04	0.00
1.3.13a/1.3.7a/1.3.6a	2.06	0.20	0.00
Total Non-coastal Stream Order 6 mapped	2.69	0.24	0.05
1.3.13a/1.3.7a/1.3.6a	3.63	0.35	0.05
Total Non-coastal Stream Order 7 mapped	3.63	0.35	0.00
Total Non-coastal stream order 5 or > 100m	**6.32**	**0.59**	**0.05**
Total Regulated Vegetation Within a Defined Distance of a Watercourse	**24.74**	**3.52**	**0.83**

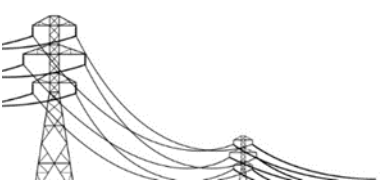
* Footprint is equivalent to the Construction Footprint for Laydowns and CEV Huts, Easement, Land Acquisition and Adjusted Substation Footprints.

** Residual impact area is equivalent to the total area of Project Activities deemed a residual impact under certain criteria relevant to MNES

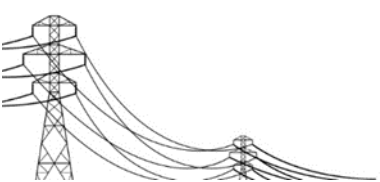
*** Significant residual impact area is equivalent to classified residual impacts of Project Activities deemed significant impacts under MNES and MSES

Appendix A Response to Submissions on Draft EIS and Draft EIS Supplement

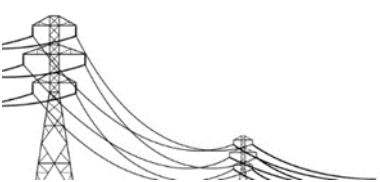
Appendix B Revised Project Description



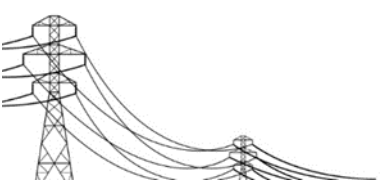
Appendix C Revised Concept Tower Siting Plans



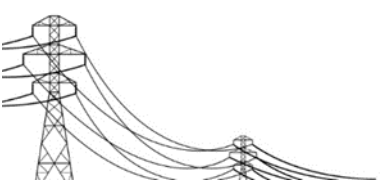
Appendix D Revised Concept Infrastructure Layout Plans and Cross Sections



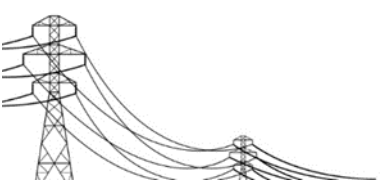
Appendix E Revised Information Matters of National Environmental Significance



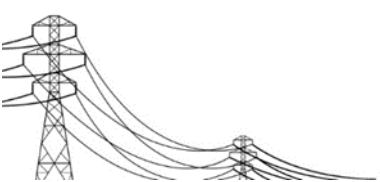
Appendix F Additional Information on Flora and Fauna



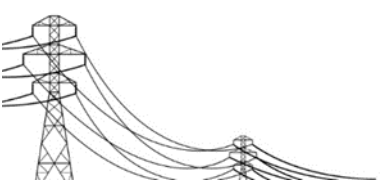
Appendix G Draft Biodiversity Offset Management Strategy



Appendix H Additional Information Economics



Appendix I Additional Management Plans and Commitments Register



Appendix J Flood Risk Assessment