

February 2025



Theodore Wind Farm – Connection Project

Final Corridor Selection Report



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Acknowledgement of Country

Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular the lands on which we operate. We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.



Executive summary

This Final Corridor Selection report (FCSR) has been prepared by Queensland Electricity Transmission Corporation Limited, trading as Powerlink Queensland (Powerlink), for the proposed Theodore Wind Farm Connection Project (the project).

The purpose of this FCSR is to outline the engagement undertaken with landholders, Traditional Owner groups, the community and other stakeholders regarding the corridor selection process, how feedback has been considered, and refinements made to finalise a 1km-wide corridor, within which a 60m-wide easement alignment will be determined.

Project background

Powerlink is a leading Australian provider of high voltage electricity network services, and owns, develops, operates and maintains the high voltage electricity transmission network in Queensland.

Powerlink has been engaged by RWE Renewables Australia (RWE) to connect their wind farm to the electricity network, requiring a new double circuit 275 kilovolt (kV) transmission line to be established connecting the wind farm to Powerlink's proposed Mt Benn Substation.

For this project, Powerlink has integrated the work previously carried out by RWE with Powerlink's processes to continue with the corridor selection process and undertaken further engagement activities before finalising a 1km-wide corridor.

Theodore Wind Farm

Theodore Wind Farm is a proposed 1.1 gigawatt (GW) wind farm located in the Banana Shire region of Queensland, approximately 20km east of Theodore, in Central Queensland. RWE is undertaking this renewable generation project.

RWE's wind farm is proposed to comprise up to 170 wind turbines and a battery energy storage system with an initial output of approximately 1.1GW of renewable energy. Energy generated by the proposed wind farm will provide low-cost clean energy to Queensland households.

Approach to corridor selection

Project objectives are the high-level value-based considerations that are used during the corridor selection process. The key objectives considered as part of this project are:



Social

To consider the use of land and the community livelihood within and adjacent to corridor options.



Environment

To consider a balanced approach to corridor selection with the least practicable impact on environment and heritage values.



Economic

To consider construction and operational factors such as cost at a preliminary level, given the scale of the project.

The methodology used for the corridor selection included using publicly available information, as well as technical and spatial data, to identify constraints and opportunities from a social, environmental and economic perspective. These constraints and opportunities were used to assess a 1km-wide recommended corridor that, on balance, achieves the project objectives.

Recommended transmission corridor

In late October 2024, Powerlink released for review and comment, the Draft Corridor Selection Report (DCSR) which identified a 1km-wide recommended corridor.

Several corridor alternatives were originally explored by RWE for a transmission line between the proposed Theodore Wind Farm and the proposed Mt Benn Substation.

Powerlink subsequently undertook a desktop review of existing and current data to identify physical, natural, social and economic characteristics, to further assess the corridor alternatives and preferred corridor to ensure suitability of the recommended corridor.

The recommended corridor equally managed the constraints and opportunities, ultimately resulting in a corridor which aimed to balance the project objectives.

Further information on the 1km-wide recommended corridor is set out in Powerlink's Theodore Wind Farm Connection Project Draft Corridor Selection Report (available online at powerlink.com.au/theodore).

Final 1km-wide corridor

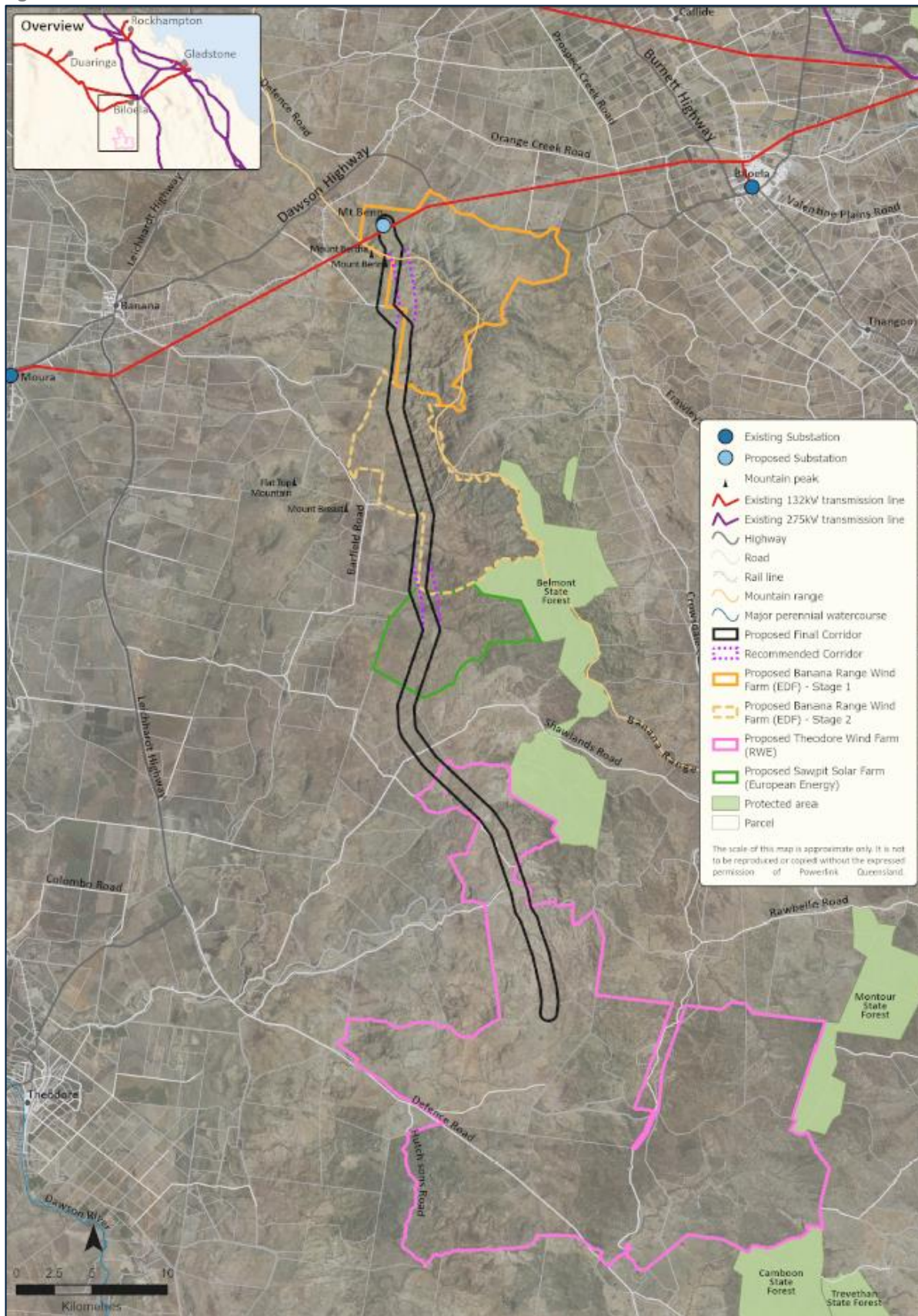
Powerlink sought feedback on the DCSR to help inform the refinement and selection of a final 1km-wide corridor. Valuable feedback influenced the location of the final corridor through identification of how the land is used, local constraints, improvements and future development plans.. Working with landholders in those areas, Powerlink considered and adopted feedback resulting in minor realignments of the corridor with a slight increase in length (0.9km) to the overall corridor.

Through the corridor selection process a final 1km-wide corridor has been identified, in which a 60m-wide easement alignment will be determined. The final 1km-wide corridor maintains the ability to:

- achieve a relatively direct route between the proposed Theodore Wind Farm and the proposed Mt Benn Substation
- involve a minimal number of properties
- minimise impacts on agriculture, cropping and grazing lands
- be located a considerable distance from existing townships and major highways
- enhance opportunities for co-existence with other proposed renewable energy projects in the area.

The final corridor identified within this FCSR is shown in Figure 1.

Figure 1: Final corridor



1.0 Introduction

1.1 Strategic context

Queensland is currently seeing an influx of investment in new electricity generation including in large-scale solar and wind projects.

Powerlink manages the grid connections process by which renewable energy projects can connect to the electricity grid under the National Electricity Rules (NER) (Chapter 5).

This process requires the formal lodgement of a connection application which is submitted and accepted under NER. Following commercial negotiations and discussions, Powerlink may provide an Offer to Connect.

RWE have submitted a connection application to Powerlink to commence the connection process. This has enabled the creation of a formal project for Powerlink to engage publicly on.

1.2 Project background

The Theodore Wind Farm is a proposed 1.1GW wind farm located in the Banana Shire region of Queensland, approximately 20km east of Theodore in Central Queensland.

RWE is undertaking this renewable generation project with energy generated by the proposed wind farm to provide low-cost clean energy to Queensland households.

To connect the proposed wind farm to the electricity network a double circuit 275kV transmission line between Powerlink's proposed Mt Benn Substation and the proposed Theodore Wind Farm is required.

RWE has engaged Powerlink to complete corridor selection and design of the transmission connection required.

1.3 Purpose of this report

Powerlink has prepared this FCSR, to conclude the corridor selection processes, involving landholders, Traditional Owner groups, the community and other stakeholders, by identifying a final 1km-wide corridor.

Following the finalisation of the 1km-wide corridor, detailed discussions will continue with all directly impacted landholders, Traditional Owner groups and other stakeholders, and further analysis and studies will be undertaken to enable the refinement of the final 1km-wide corridor to a 60m-wide easement alignment.

The purpose of this FCSR is to:

- outline the public consultation process recently undertaken regarding the recommended corridor
- provide an overview of stakeholder feedback and how this feedback has been considered
- identify amendments to the corridor to inform the identification of a final corridor
- identify a final 1km-wide corridor for further refinement to a 60m-wide easement alignment.

2.0 Final 1km-wide corridor

Following the release of the DCSR, landholders, Traditional Owner groups, the community and other stakeholders were invited to provide feedback on the 1km-wide recommended corridor.

Valuable feedback influenced the location of the final corridor through identification of how the land is used, local constraints, improvements and future development plans. Based on this feedback, minor realignments of sections of the previously identified recommended corridor have been adopted.

The final 1km-wide corridor will now be further refined, narrowing to a 60m-wide easement alignment. Powerlink will continue to work directly with landholders and key stakeholders, in parallel with completing field and site investigations, to best determine the final alignment.

2.1 Corridor engagement and feedback

Powerlink acknowledges the time and effort undertaken by landholders, Traditional Owner groups, the community and other stakeholders who provided feedback on the DCSR. In addition, it is important to note that the analysis of community feedback on the DCSR within this report forms part of Powerlink's broader commitment to genuine and meaningful engagement.

2.1.1 Corridor engagement

In October 2024, Powerlink released a DCSR which included a 1km-wide recommended corridor. Landholders, Traditional Owner groups, the wider community and other stakeholders were invited to provide feedback. Information on the DCSR release was shared via:

- phone calls to landholders
- letters and emails to landholders and other stakeholders
- briefings with Traditional Owner representatives, Local Government agencies and the State Member
- distribution of a project newsletter
- Powerlink website information including FAQs
- media release and advertisements within the local newspaper.

The DCSR was open for public comment between 28 October 2024 and 29 November 2024. During this time, feedback was received via various methods including emails, face-to-face meetings, website and feedback forms providing the opportunity for interested stakeholders to comment directly on the 1km-wide recommended corridor, highlighting their areas of interest and feedback. Throughout this consultation period, Powerlink had 58 interactions with landholders, providing copies of mapping and discussing on-ground insights as to how properties are used, helping to identify constraints and verify desktop data.

In addition, three community information drop-in sessions were held in November 2024 at Biloela, Theodore and Banana to enable another avenue for feedback. These sessions were promoted via Powerlink's website and social media channels, newspaper advertisements, various community Facebook groups, Local Government channels, and in the project newsletter that was distributed.

2.1.2 Corridor feedback

Feedback received during the corridor selection phase was critical for Powerlink to better understand on-ground conditions, constraints and land uses including various farming and agriculture operations, to fully inform the final corridor alignment.

Key themes have been identified that cover a wide range of topics including biosecurity, impacts to land values, economic impacts and compensation, and land use impacts to properties including design considerations (e.g. tower heights and locations). A summary of these key themes has been provided within Table 1.

Table 1: Key landholder feedback and response

Key landholder feedback	Response
Feedback theme	
Biosecurity <ul style="list-style-type: none"> • potential spread of weeds from Powerlink's use of access tracks and activity within the easement • vehicle washdowns prior to entering properties. • Ensuring fire management and risk assessments are undertaken 	<p>We understand biosecurity is a priority for landholders. We take biosecurity seriously and have processes in place to avoid spreading weeds between properties or introducing new weeds from outside the local area.</p> <p>For example, we take preventative measures to minimise exposure to weeds, such as:</p> <ul style="list-style-type: none"> • conducting regular vehicle wash downs • avoiding travel through areas heavily affected by biosecurity matter • visiting clean areas first, before travelling to affected areas • staying on roads and designated access tracks in work areas • obtaining weed and seed declarations on any fill material brought onto a property. <p>Powerlink will work with landholders to identify biosecurity risks on each property and develop appropriate management measures, including those referred to in specific biosecurity management plans.</p> <p>We value our long-term, working relationships with landholders, and intend to work with landholders regarding biosecurity from the planning phase through to construction, operation and maintenance.</p>
Compensation <ul style="list-style-type: none"> • Payment for landholders' time 	<p>Powerlink is committed to being fair, transparent and equitable when negotiating payments with hosting landholders.</p> <p>Powerlink introduced the Project Participation and Access Allowance (PPAA) in recognition of the important role of landholders in planning and delivering our transmission projects.</p> <p>The PPAA is a payment offered by Powerlink to recognise the cooperation from landholders in providing input and facilitating access to their property for technical studies. The PPAA is separate from, and in addition to, any compensation to be paid if an easement or substation is to be progressed on that land.</p>
Land use impacts <ul style="list-style-type: none"> • Design considerations including topography, water ways • Farming practices, aerial mustering and laneways • Future development plans 	<p>Powerlink is committed to working with landholders to understand how their land is used including timing of key activities such as farming operations, future development plans and any potential incompatibility these activities may have when placing towers and accessing properties.</p> <p>Management strategies will be developed to minimise impacts, such as adjusting construction schedules to coincide with the agricultural calendar and working closely with landholders to ensure their long-term property development plans are considered during the life of the project.</p> <p>Changes to the final corridor are reflective of consideration to farming practices. Feedback regarding design considerations will continue to be investigated into the easement alignment phase of this project.</p>

All feedback received during the engagement period has been collated and considered by Powerlink.

Powerlink has also had discussions with Traditional Owner groups on the processes undertaken to identify the 1km-wide corridor, and we remain committed to continue to engage with the Traditional Owner groups through ongoing processes.

Ongoing discussions with both landholders and Traditional Owner groups will consider other areas within the proposed 1km-wide corridor identified as we determine a potential alignment for the 60m-wide easement.

2.1.3 Corridor alignments

Powerlink's commitment to early, ongoing and transparent engagement with landholders, Traditional Owner groups and other stakeholders, has resulted in tangible changes to the corridor. As a result of feedback received, Powerlink has investigated two areas for realignment:

Northern section

- This realignment occurs in the northern area of the corridor and entails the alignment of the corridor from proposed Mt Benn substation for an approximate distance of 1.3km to the south where it rejoins the original recommended corridor.
- This area is constrained by existing land uses including grazing operations for which associated farming infrastructure was found to exist within the corridor. With the identified constraints taken into consideration, relocating the corridor to the west, found greater ability to significantly reduce impacts in this area.
- Detailed discussion with landholders will continue through our next project phase as we work to identify a 60m-wide easement alignment in this area. **This realignment has been adopted in the final 1km-wide corridor.**

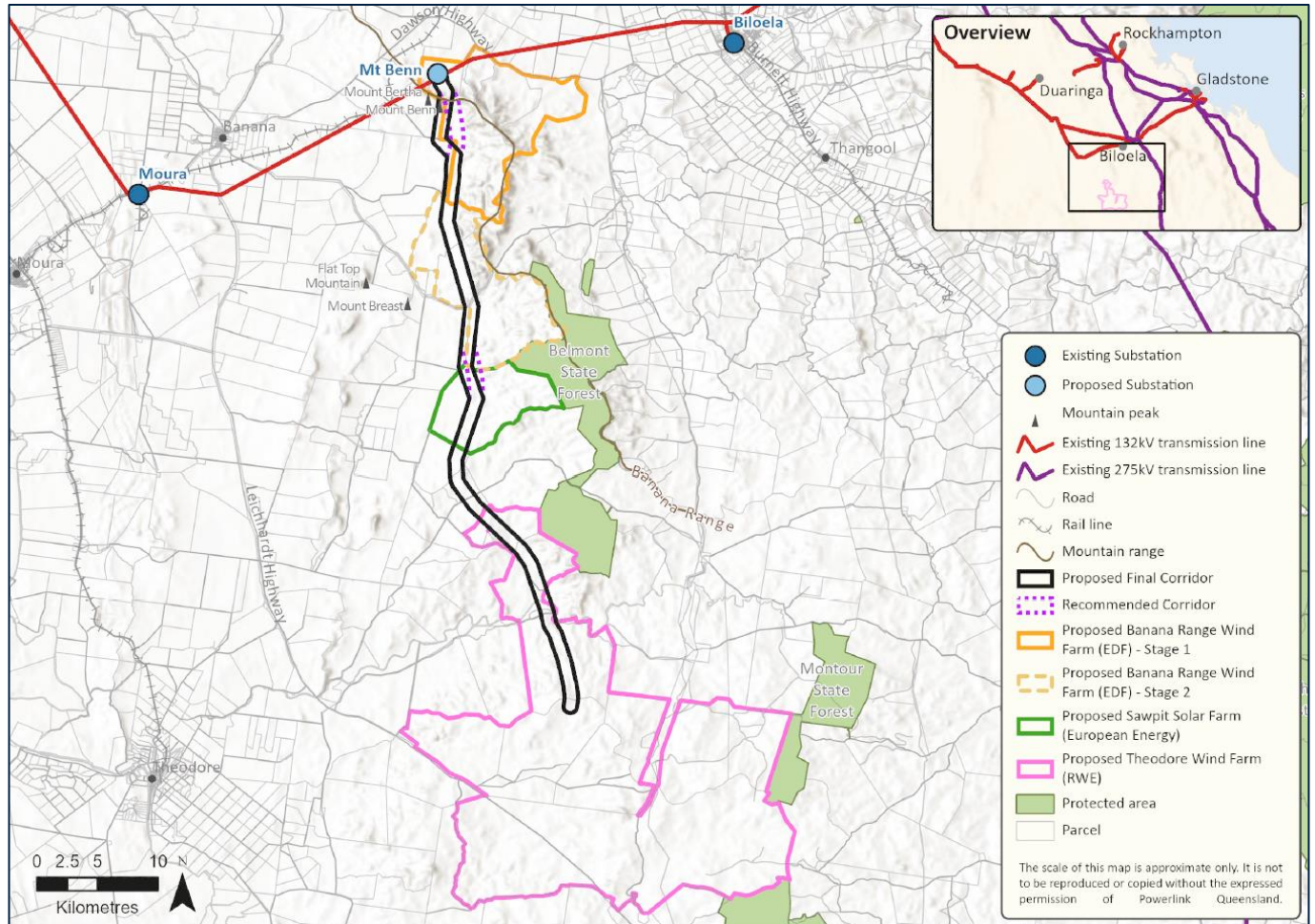
Central section

- This realignment occurs in the central area of the corridor, surrounding Sawpit Creek.
- This area is constrained by existing land uses including various grazing operations and, following engagement with landholders, an alternative alignment was explored. In consideration of this alternative corridor alignment, reduced environmental impacts were also identified, particularly regarding the crossing of Sawpit Creek. These considerations have resulted in the corridor being relocated to the west.
- Detailed discussion with landholders will continue through our next phase as we identify a 60m-wide easement alignment in this area. **This realignment has been adopted in the final 1km-wide corridor.**

With these two realignments adopted, the final 1km-wide corridor length has increased by 0.9km (1%) overall, resulting from landholder consultation to improve co-existence opportunities in this area. Further detail on the social, environment and economic criteria is contained in Appendix B.

Figure 3 below shows the final corridor in black, with the recommended corridor shown in purple. The hatched line of the recommended corridor reveals where changes have been made and these sections removed between the draft and final corridor, based on landholder and key stakeholder feedback.

Figure 2: Revised corridor based on landholder feedback



2.2 Summary of final 1km-wide corridor

Overall, the final 1km-wide corridor continues to achieve the least overall impact across social, environment and economic objectives.

The final 1km-wide corridor results in reduced impacts on vegetation Category B Least Concern, Category B Endangered and Category R: reef regrowth watercourse vegetation, whilst impacts have marginally increased on vegetation Category B: Of Concern vegetation and threatened ecological communities. Refinement of the 1km-wide corridor to a 60m-wide easement alignment will be aimed at further avoiding and minimising these impacts. Specifically, this will involve working closely with landholders to ensure the tower design and placement is carefully considered with opportunities to avoid areas of particular interest or value to be explored further.

Whilst a slightly longer corridor has been finalised (900m of additional length), no new landholders have been introduced to the project. Appendix C identifies the high-level constraints and opportunities across the final corridor.

Further opportunities to minimise social, environmental and economic impacts will be explored as the final 1km-wide corridor is refined to a 60m-wide easement alignment. The design phase is key to being able to take advantage of any opportunity to further reduce impacts in conjunction with feedback from landholders.

Table 1: Assessment of the 1km-wide recommended corridor and final corridor

Criteria	Recommended Corridor	Final Corridor
Social criteria		
Criteria 1: Tenure and zoning		
Number of land parcels intersected (no.)	16	16
Number of landholders directly impacted (no.)	12	12
Number of residential dwellings within the corridor (no.)	1	1
Number of land parcels within tenures other than freehold (no.)	1	1
Land other than rural zone intersected (ha)	0.0	0.0
Criteria 2: Key Resource Areas		
Area of corridor within key resource areas (ha)	0.0	0.0
Criteria 3: Strategic cropping land		
Area of corridor within strategic cropping land (ha)	197.8	197.8
Environment criteria		
Criteria 4: Watercourses/waterways and flooding		
Number of watercourse intersections (no.)	5	5
Area within flood mapping (ha)	54.8	54.8
Criteria 5: Vegetation and protected areas		
Threatened ecological communities (ha)	14.1	26.1
Category B (remnant) least concern Regional Ecosystem (RE) (ha)	335.3	319.5

Criteria	Recommended Corridor	Final Corridor
Category B (remnant) of concern RE (ha)	51.0	78.1
Category B (remnant) endangered RE (ha)	0.4	0.0
Category C (high-value regrowth vegetation) RE (ha)	7.2	7.2
Category R (reef regrowth watercourse vegetation RE) (ha)	14.3	11.9
Economic criteria		
Criteria 6: Corridor length and bend points		
Length of corridor (km)	55.4	56.3
Number of bend points (estimate only)	17	18
Criteria 7: Slope		
Slope 10-20% (% of corridor)	20%	20%
Slope >20% (% of corridor)	6%	6%
Criteria 8: Existing infrastructure		
Low voltage distribution infrastructure (i.e. Ergon Energy) crossings corridor (no.)	3	2
Crossings of formed road (no.)	2	3
Length of formed roads within corridor (km)	3.6	4.1

The engagement completed to date reflects Powerlink's commitment to genuine and meaningful engagement, which forms a critical element of the corridor selection process. Feedback received, whether positive or negative, helps to inform Powerlink about how to equally manage the constraints and opportunities of a project, from an economic, environmental and social perspective. It shows Powerlink's commitment to actively listen to feedback received and respond where possible to lessen impacts to properties, business operations and the environment.

Powerlink has considered specific site and project feedback received directly from landholders to minimise impacts to existing land uses and farming operations, and as a result has actively sought to address those concerns in the identification of the final corridor.

Powerlink acknowledges the deep and ongoing connection Traditional Owner groups have with the area, and value their insights provided. Our project team is continuing to engage with Traditional Owner representatives beyond the formal consultation period, helping to gain more in-depth insights into areas of cultural heritage significance.

3.0 Legislative and approval requirements

There are several potential legislative and approval requirements in order to progress the project. Some of the Local, State and Federal Government approval frameworks are discussed in this section.

3.1 Potential environmental approvals

There are a number of potential legislative and approval requirements in order to progress the project. Some of the State and Federal Government approval frameworks are discussed in this section. Potential approvals are subject to final corridor refinement, actual infrastructure disturbance locations and further ecological and cultural heritage investigations, but however, may include:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Cth) Referral and potential approval for significant impact on Matters of National Environmental Significance (MNES)
- Ministerial Infrastructure Designation (MID) under the *Planning Act 2016* (Planning Act) for electricity operating works
- Clearing permit for the clearing of protected plants under the *Nature Conservation Act 1992* (NC Act)
- Species Management Program (SMP) under the *Nature Conservation (Animals) Regulation 2020* for the tampering of active breeding places where impact cannot be avoided (Low Risk SMP required for impact to Least Concern species/High Risk SMP is required for impact to colonial breeders, near threatened, Vulnerable, Endangered and Critically Endangered species).

Prior to the future construction of the project, further assessment of the project's potential legislative obligations should be undertaken once the corridor is further refined, and additional desktop and field investigations have been undertaken.

A full list of legislative considerations and other obligations required for the project is provided within Appendix D.

4.0 Conclusion and future studies

The final 1km-wide corridor has been identified for the Theodore Wind Farm Connection Project. In establishing a final corridor several assessment criteria were analysed in addition to the careful consideration of feedback received from landholders, Traditional Owner groups, the community, other stakeholders, and spatial analysis.

Engagement with landholders as part of the DCSR process has established constructive relationships. Powerlink will seek to build on and incorporate further collaboration with landholders and other stakeholders moving forward. This collaborative approach will strengthen our ability to identify and integrate amicable solutions, resulting in stronger opportunities for co-existence with landholders.

Through the corridor selection and refinement processes, the final 1km-wide corridor:

- achieves a relatively direct route between the proposed Theodore Wind Farm and the proposed Mt Benn Substation
- involves a minimal number of properties
- minimises impacts on agriculture, cropping and grazing lands
- is located a considerable distance from existing townships and major highways
- enhances opportunities for co-existence with other proposed renewable energy projects in the area.

Following release of the FCSR, additional detailed technical studies and continued engagement will help to narrow down and determine a 60m-wide easement for the final transmission line alignment.

4.1 Future studies and engagement

Detailed field studies are required to further identify project constraints at an individual property level, and opportunities within the final 1km-wide corridor, to optimise the transmission line design whilst achieving the social, environment and economic objectives of the project. This phase of the project focuses heavily on identifying specific areas to avoid, mitigate and to further manage throughout the design of the proposed transmission line alignment.

Planning approval through the use of the MID process will be required for this project. In addition, detailed environmental assessments and approvals will also be undertaken as part of the design phase. Concurrent to these processes, property access and easement negotiations will also commence. To facilitate these processes, various elements require further details such as those referenced below.

Social

- Landholder and community consultation – engagement with stakeholders, particularly impacted and surrounding landholders and Traditional Owner groups, on the final corridor to understand use of land, proximity to homes and potential impacts to properties.
- Social and economic impact assessment – investigations to identify potential social and economic impacts from the construction and operation of the project.

Environment, heritage and planning

- Ecology – further assessment, including targeted field surveys of the final corridor to identify areas that contain habitat for threatened flora and fauna species, or threatened ecological communities. The assessment will also determine the potential impact to habitat for threatened flora and fauna species.
- Biosecurity matters – further investigation into the potential biosecurity risks will be undertaken prior to construction.
- Cultural Heritage– further investigations are required to identify any potential impact to Indigenous and non-Indigenous cultural heritage values.

Economic

- Land, geology and soils – contaminated land, acid sulphate soils or dispersive soils can pose construction issues due to the need to implement specialist management or design practices and/or treatment. Field investigations including sampling and analysis will be undertaken as part of geotechnical investigations.
- Poor ground conditions – geotechnical investigations to identify problematic soils and geology such as hard rock, which can pose constructability difficulties, or substantially increase project costs due to specialist design required and/or additional construction materials and foundations, as well as access and easements to be provided.
- Flood potential – further investigation into the potential for flooding within the corridor will be required to understand the risk to the project both during construction and operation.
- Crossings and bends – further investigation to confirm the minimum number of interfaces for the corridor with other infrastructure such as roads, rail, pipelines and other identified values is required to understand where these asset types are located and options for the final alignment. The number of potential bends and associated impacts to the project can be assessed and further refined during the next phase.

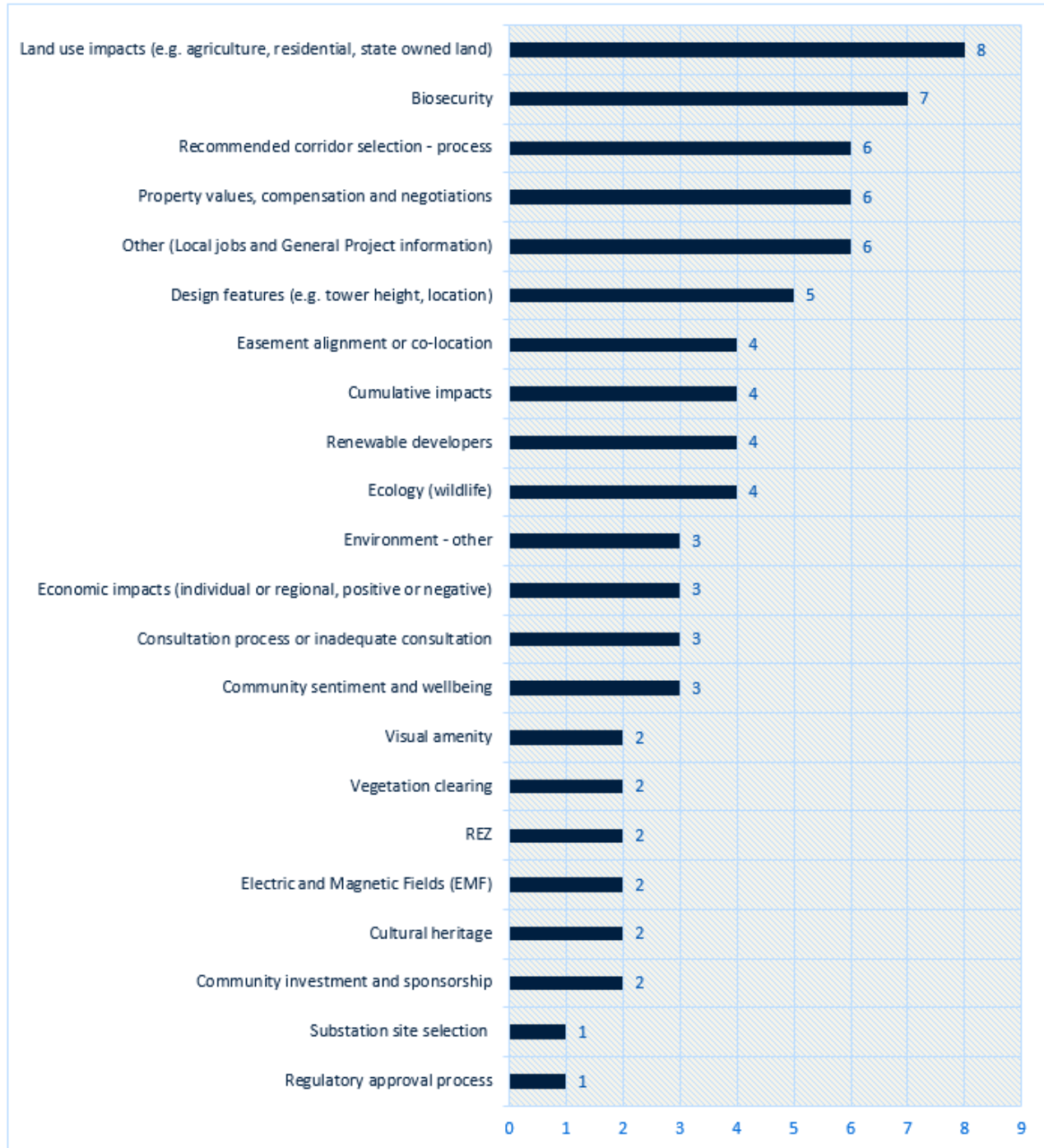
The corridor selection process has relied on data from publicly available data sources and the feedback of all engagement activities undertaken to date. Investigations will need to be undertaken and mapped at the individual lot-based/property-specific level and taken into consideration during the design of the proposed transmission line.

As the project progresses, Powerlink remains committed to engaging with landholders, Traditional Owner groups, the community and other stakeholders to share information on project milestone and seek feedback to inform project decision-making.

Appendix A – Feedback themes

All feedback received through the Draft Corridor Selection Report (DCSR) consultation phase has been categorised into 22 themes listed below as a reflection of the key interests and concerns.

Figure 3: Key themes from engagement on the Draft CSR



Appendix B – Key considerations

The corridor identification and selection process identified and considered opportunities and constraints from a social, environmental and economic perspective, in addition to identifying a final corridor for further investigation.

The methodology used for the corridor selection included using publicly available information, as well as technical and spatial data, to identify constraints and opportunities from a social, environmental and economic perspective.

A summary of the social, environmental and economic quantitative criteria considered in the identification of the final corridor has been provided below.

Social

Table 2: Table of changes to final 1km-wide corridor when compared to recommended 1km-wide corridor

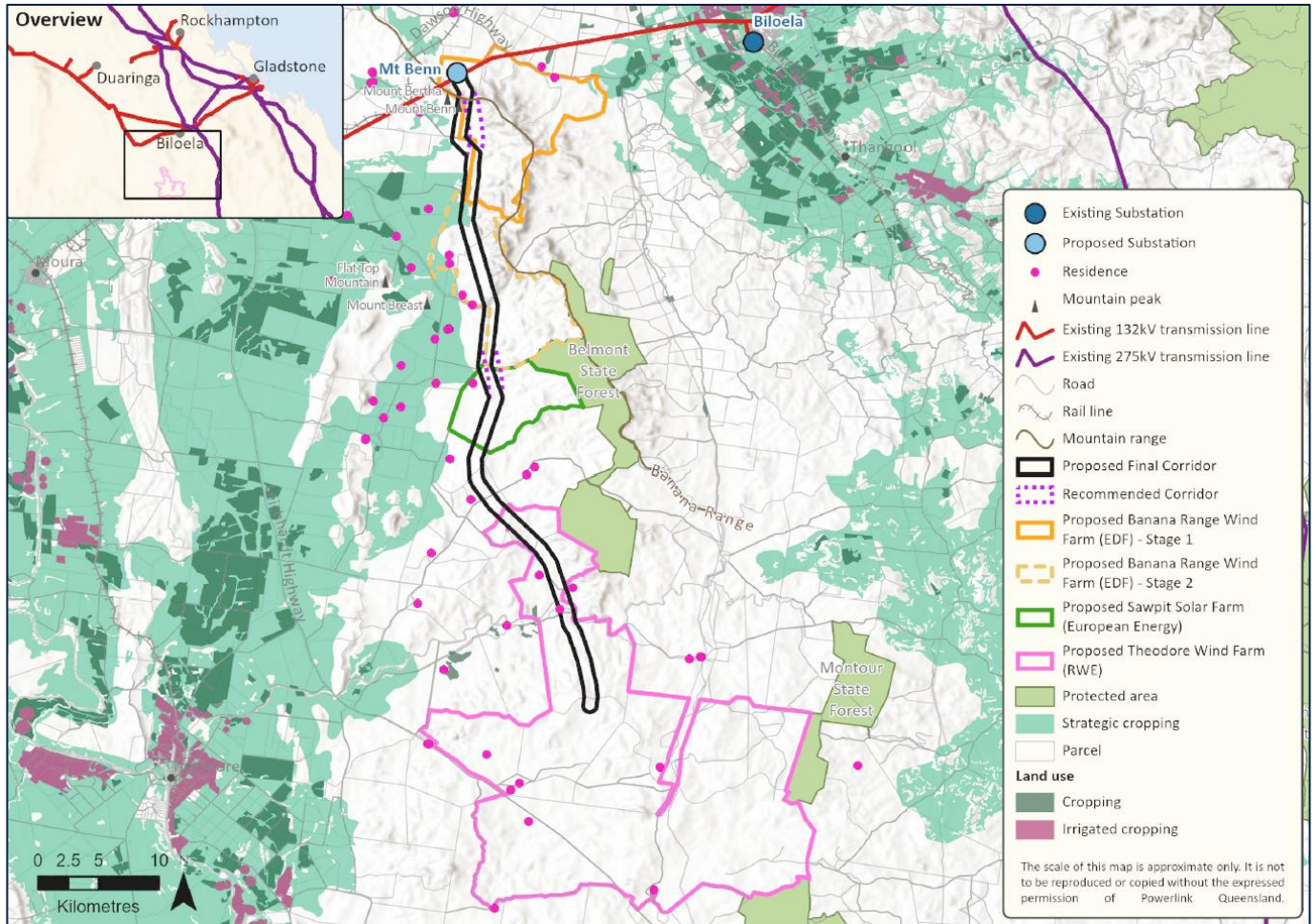
Criteria	Final Corridor
Social criteria	
Criteria 1: Tenure and zoning	
Number of land parcels intersected	No change
Number of landholders directly impacted	No change
Number of residential dwellings within the corridor	No change
Number of land parcels within tenures other than freehold (no.)	No change
Land other than rural zone intersected (ha)	No change
Criteria 2: Key Resource Areas	
Area of corridor within key resource areas (ha)	No change
Criteria 3: Strategic Cropping Land	
Area of corridor within strategic cropping land (ha)	No change

Table 3: Summary of considered social criteria associated with the final corridor

Assessment criteria	Final corridor assessment outcome
Social	
Land use and zoning	<p>The final corridor is located within the Rural Zone under the <i>Banana Shire Planning Scheme 2021</i>.</p> <p>The placement of the corridor within the rural zoning is more preferential to the placement within residential or open space zoned land because of the social impacts resulting from easement acquisition within a residential zoned area and amenity impacts associated with changing open parkland to a substation.</p> <p>Further, areas used for grazing activities including broadacre cropping are more common further to the west which reflects the flatter topography. As a result of landholder feedback received, changes were made to the corridor that better align with existing farming operations.</p> <p>As a result of these changes, the final corridor is not envisaged to significantly impact current grazing activities and will avoid areas used for cropping purposes.</p>

Assessment criteria	Final corridor assessment outcome
Property requirements	<p>The final corridor does not introduce any additional properties or landholders.</p> <p>The final corridor is predominantly located on freehold land with only one of the 16 properties being leasehold title. In addition, whilst there are 16 properties within the final corridor, there are 12 property owners, reducing the corridor's potential social and amenity impact.</p>
Affected stakeholders	<p>The final corridor does not result in any additional impacts to residential dwellings.</p> <p>The final corridor is located in a rural area and currently impacts one dwelling. Given the current width of the final corridor is 1km, there is further opportunity in the design of the final easement alignment to ensure minimal impact upon this dwelling.</p> <p>The final corridor is located over land that is earmarked for the proposed Theodore Wind Farm, the proposed Banana Range Wind Farm and potentially the proposed Sawpit Solar Farm, maximising the ability to co-locate with future renewable energy infrastructure and significantly reducing the overall social and economic impact of the project.</p>
Visual amenity	<p>Based on desktop analysis, the final corridor impacts minimal receptors due to its location.</p> <p>Further, the topography of the area is such that advantage can be taken of elevated locations for the placement of towers. Using the network of ridges provides the opportunity to develop access tracks and construction laydown areas that avoids the steeper section of the corridor, in addition to lessening the overall visual footprint of the project given the topography.</p> <p>Methods to reduce visual amenity impacts will be considered in the design component of the project.</p>

Figure 4: Final corridor – Land use constraints



Environmental

Table 4: Table of changes to final 1km-wide corridor when compared to recommended 1km-wide corridor

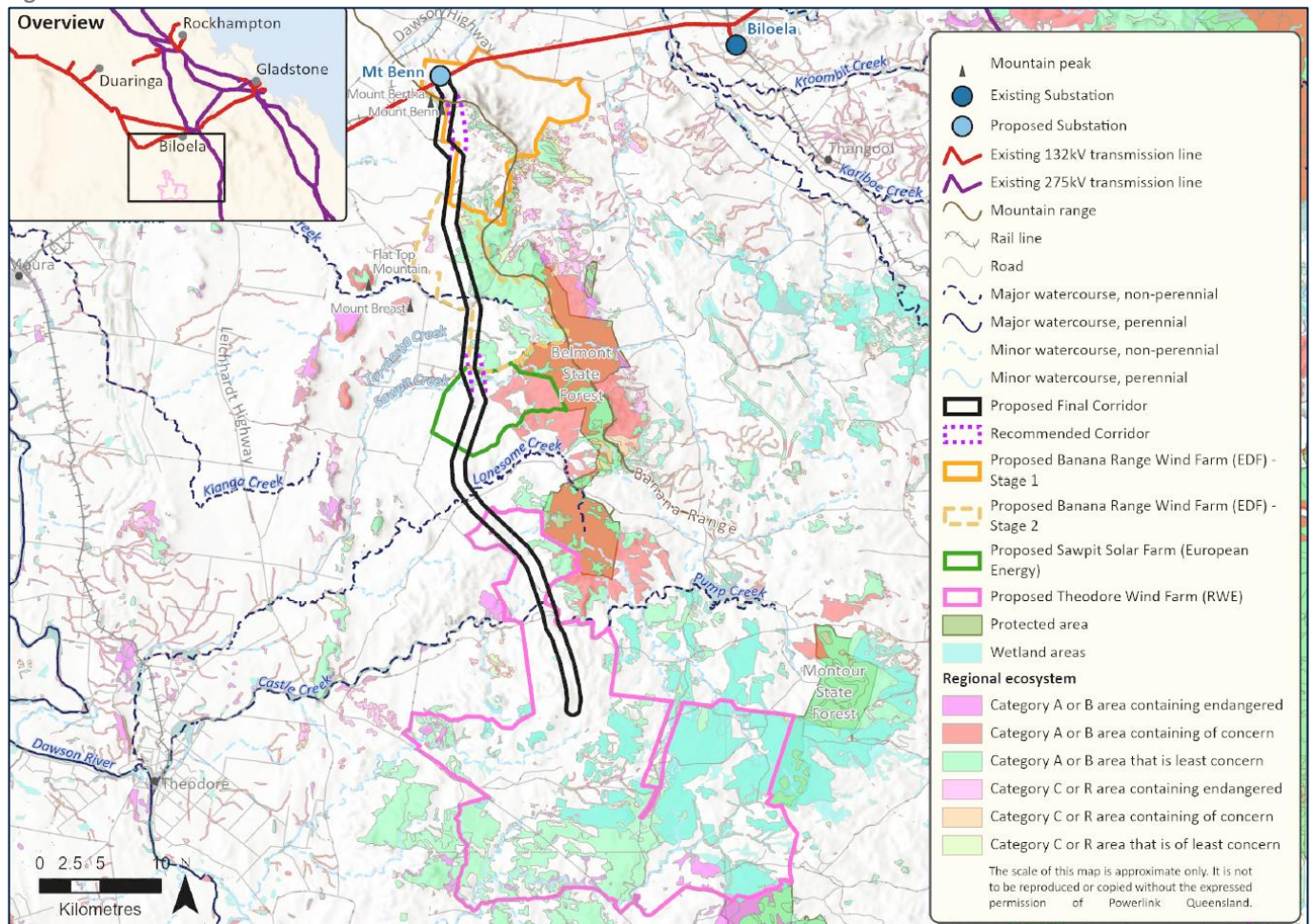
Criteria	Final corridor
Environment criteria	
Criteria 4: Watercourses/waterways and flooding	
Number of watercourse intersections	No change
Area within flood mapping (ha)	No change
Criteria 5: Vegetation and protected areas	
Threatened ecological communities (ha)	Increase by 12ha
Category B (remnant) least concern Regional Ecosystem (RE) (ha)	Decrease by 15.8ha
Category B (remnant) of concern RE (ha)	Increase by 27.1h
Category B (remnant) endangered RE (ha)	No impact upon this vegetation type
Category C (high-value regrowth vegetation) RE (ha)	No change
Category R (reef regrowth watercourse vegetation RE) (ha)	Decrease by 2.4ha

Table 5: Summary of considered environmental criteria associated with the final corridor

Assessment criteria	Final corridor assessment outcome
Environment	
Environment values	<p>The final corridor contains cleared land as well as regrowth and remnant native vegetation, much of which is found along the foothills of the Banana Range. Native woody vegetation within the corridor is also identified under the regulated vegetation management map as being comprised of several regulated vegetation categories defined by the <i>Vegetation Management Act 1999</i> (VM Act).</p> <p>Regional ecosystems are vegetation communities in a bioregion that are consistently associated with a particular combination of geology, landform and soil regulated under the VM Act. Regional ecosystems within the final corridor include a range of Endangered, Of Concern and Least Concern communities. Certain REs listed in Queensland also correspond to Threatened Ecological Communities (TECs) listed under the EPBC Act (Cth) and are also found to exist within the final corridor.</p> <p>Overall, whilst a net increase in impacts upon REs and associated protected areas has been identified with the final corridor, reduced impacts have been realised against Category B Least Concern vegetation and impacts removed entirely upon Category B Endangered Vegetation. Importantly, these regional ecosystems are not likely to be cleared in their entirety within the final corridor, as opportunities exist for the transmission line to navigate around several areas of regional ecosystems to prevent the need for disturbance or removal. This will be determined in the detailed design phase.</p> <p>Site investigations will be undertaken to date validate the desktop assessments.</p>
Cultural heritage	<p>Based on the search results of both Indigenous and non-Indigenous cultural heritage databases, there are no existing cultural heritage sites or objects recorded within the final corridor.</p> <p>Further consultation and engagement with the identified cultural heritage parties - the Gaangalu Nation People and Wulli Wulli People - will be undertaken by Powerlink to determine the extent and nature of other Indigenous cultural heritage that may be present within the final corridor.</p>
Waterways	<p>Surface water features cross the final corridor, generally flowing west to the Dawson River. Given the logistical requirements of the project, many of these water features cannot be avoided.</p> <p>These major waterways include Castle Creek, Lonesome Creek and Banana Creek together with a range of associated tributaries including Tarramba Creek and Sawpit Creek. These waterways are generally of high ecological significance, being bordered by remnant vegetation, wetlands and areas of regrowth vegetation.</p> <p>The final corridor does not result in any additional waterway crossings being required.</p> <p>The impacts upon waterway crossings can generally be managed but may require specific design responses to address the presence of riparian vegetation, increased flood and erosion risk and potential changes in elevation. Such design responses may increase the number of transmission structures required, their respective height or the level of erosion prevention measures required, thus increasing costs, but importantly lessening the overall impact upon the waterway and the associated ecological attributes.</p>

Assessment criteria	Final corridor assessment outcome
Environment	
Wetlands	<p>Small areas of wetlands are sporadically located throughout the final corridor, many of which are associated with the mapped waterways. Inland wetlands provide important breeding and feeding habitats for many plants and animals and as such disturbance to wetlands should be avoided if possible.</p> <p>The final corridor does not result in any additional impacts upon mapped areas of wetlands. Similarly to waterways, the impacts upon wetlands can generally be managed, but may require specific design responses to avoid such critically impact areas.</p>

Figure 5: Final Corridor – Natural areas



Economic

Table 6: Table of changes to final 1km-wide corridor when compared to recommended 1km-wide corridor

Criteria	Final corridor
Economic criteria	
Criteria 6: Corridor length and bend points	
Length of corridor (km)	Increase by 900m (56.3km)
Number of bend points (estimate only)	Increase of 1
Criteria 7: Slope	
Slope 10-20% (% of corridor)	20%
Slope >20% (% of corridor)	6%
Criteria 8: Existing infrastructure	
Low voltage distribution infrastructure (i.e. Ergon Energy) crossings corridor (no.)	Decrease of 1 crossing
Crossings of formed road (no.)	Increase of 1 road crossing
Length of formed roads within corridor (m)	Increase of 500m

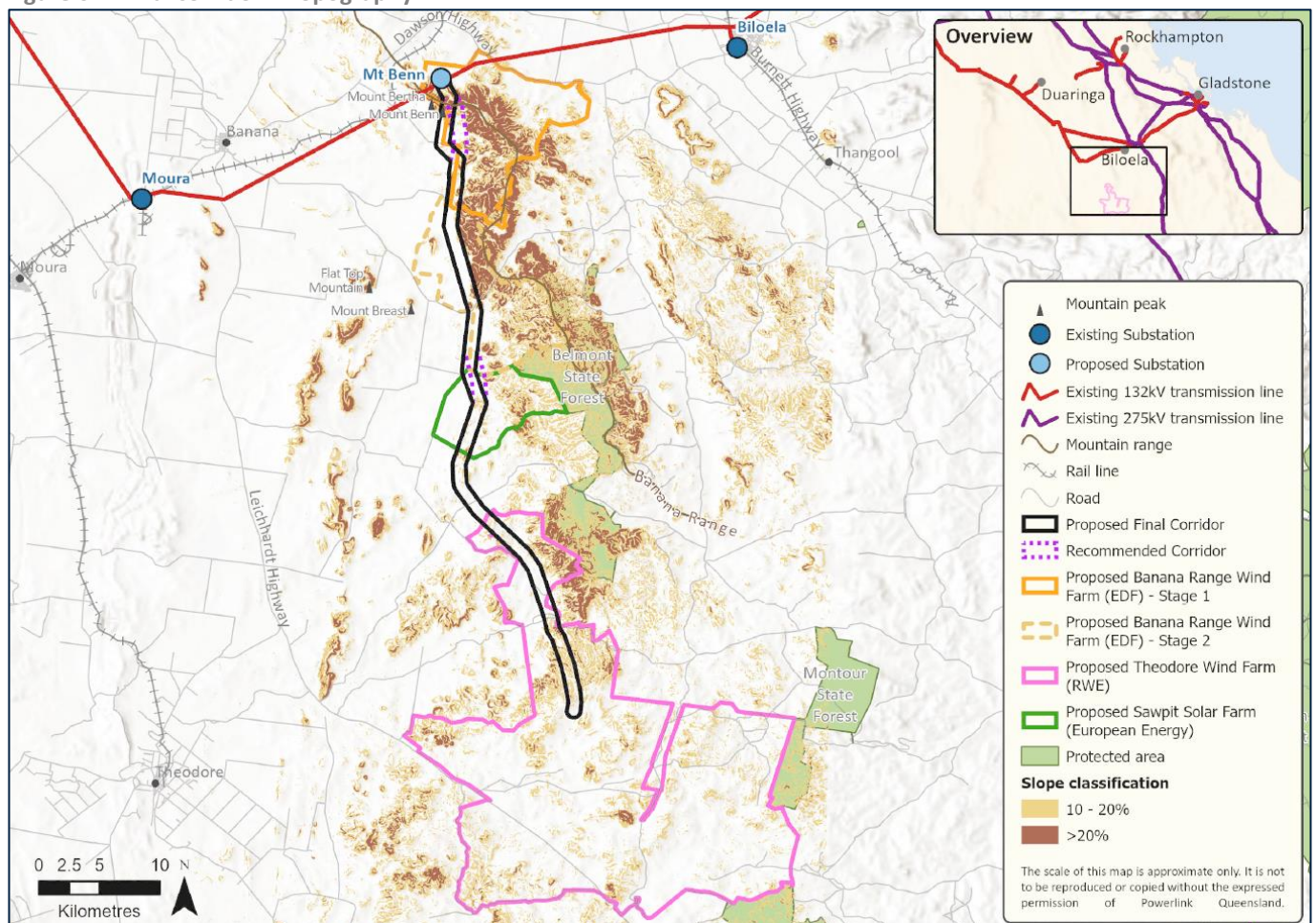
Table 7: Summary of considered economic criteria associated with the final corridor

Assessment criteria	Final corridor assessment outcome
Economic	
Corridor length	<p>The final corridor is approximately 56.3km in length, which is marginally longer than the recommended corridor by approximately 900m. Despite this, the final corridor still maintains a relatively direct route possible between the proposed Theodore Wind Farm and the proposed Mt Benn Substation.</p> <p>Longer corridors generally indicate a requirement for more materials, greater areas of disturbance, longer construction times and maintenance over infrastructure life. Contrary to this, the final corridor will result in fewer towers, reduced materials and lesser areas of disturbance as a result of improvements made to the alignment which will improve select creek crossings and reposition the corridor on better terrain.</p>

Assessment criteria	Final corridor assessment outcome
Strategic Cropping Land	<p>Strategic Cropping Land (SCL) are areas that are, or are likely to be, highly suitable for cropping due to a combination of the land's soil, climate and natural features. Other criteria used to define SCL include water availability, infrastructure for transporting or processing produce and legal constraints</p> <p>The final corridor largely avoids mapped areas of SCL which is more commonly associated with extensive areas of low-lying land currently used for agricultural production further to the west. Importantly, the final corridor does not result in any additional impacts upon areas of SCL.</p> <p>While the presence of the project within SCL may have limited impacts due to the transmission lines being located above ground level, the location of transmission structures and the need to maintain a cleared access track may reduce use of the easement for agriculture in some areas. Consequently, corridors affecting a smaller extent of SCL were considered the most favourable.</p> <p>Further, the final corridor, in select locations, is located amongst steeper and more undulating terrain which is characteristic of rudisol soils which are poorly developed (shallow and stony) and are not conducive to cropping. Importantly, the final corridor intersects larger areas of rudisol soils and passes over steeper terrain, which severely reduces the impact upon SCL, as such soil types are not generally favoured for agricultural purposes.</p>
Bend points	<p>The number of bend points is a proxy measure of the cost of the transmission line. It is assumed that the greater number of bends, the higher the cost of construction.</p> <p>One additional bend point has been identified in the final corridor however Powerlink has already identified areas along the corridor where improvements in design can be achieved which will result in a reduction of overall construction costs.</p> <p>Importantly, the overall length of the final corridor still maintains a relatively direct route possible between the proposed Theodore Wind Farm and the proposed Mt Benn Substation.</p> <p>As the final corridor is located within close proximity to the Banana Range, it has more frequent bend points to follow the base of the range and navigate around areas of higher elevation. Ultimately, the additional bend point did not by itself have a material impact on the selection of the final corridor.</p>
Slope	<p>Steep topography limits vehicle and machinery access and significantly increases the required earthworks at each tower site. Additional easements and access routes are generally required in steep country and with potential for environmental impacts.</p> <p>As the final corridor is located within close proximity to the Banana Range, the route does encounter more undulating topography than areas further to the west. Despite this, there is no material change to amount of slope encountered within the final corridor.</p> <p>The corridor selection process adopts a balanced approach and equally considers all assessing criteria in determining the final corridor. In this instance, a shorter and more direct corridor route that maximised co-location opportunities with proposed renewable energy projects, and reduced overall social and visual amenity impacts, was considered more beneficial to the project than slope alone.</p> <p>Contrary to the above, there are also opportunities to refine tower locations to benefit from ridge top locations to increase the distance between towers.</p>

Assessment criteria	Final corridor assessment outcome
Existing infrastructure	<p>Access to roads for construction machinery is critical to the efficient construction of energy infrastructure.</p> <p>The final corridor does not cross any State-controlled roads or existing rail lines.</p> <p>Whilst local roads are present within the corridor alternatives explored, the final corridor does result in the crossing of one additional road. Importantly though, whilst not an impediment to corridor selection, access to the local road network does assist in the construction and ongoing maintenance of the transmission line.</p> <p>The final corridor has resulted in one less crossing being required over existing Ergon Energy high voltage cables and powerlines which are currently used to provide critical connections to rural properties.</p> <p>An existing 132kV Powerlink transmission line and easement extends along the north-western boundary of the investigation area and will assist in co-location opportunities in connecting the transmission line to the proposed Mt Benn Substation.</p> <p>No airstrips exist within the broader investigation area however smaller airstrips not identified on mapping tools may be identified upon further site and project investigations.</p>

Figure 6: Final corridor – Topography



Appendix C – Detailed flora and fauna information

The area featuring the final corridor contains cleared land as well as regrowth and remnant native vegetation, much of which is found along the foothills of the Banana Range, on the eastern side of the final corridor. The identified remnant vegetation is predominantly a mix of Of-Concern and Least Concern regional ecosystems. Further west, there are only limited areas containing environmental significance due to the area being predominantly used for grazing and agriculture purposes.

The Protected Matters Search Tool (PMST) identifies MNES protected under the EPBC Act (Cth). An ecological community is a naturally occurring vegetation community. Its structure, composition and distribution are determined by environmental factors such as soil type, position in the landscape, altitude, and climate and water availability. EPBC Act listed threatened ecological communities are listed in Table 8.

Table 8: EPBC Act listed threatened ecological communities

Common name	Regional Ecosystem Identifier	Threatened category	Likelihood
Brigalow	11.12.21	Endangered	Likely
	11.3.1	Endangered	Unlikely
	11.9.1	Endangered	Likely
	11.9.5	Endangered	Likely
Coolibah-Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	-	-	Unlikely
Poplar Box Grassy Woodlands on Alluvial Plains	11.3.2	Of-concern	Likely
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	11.3.11	Endangered	Unlikely
	11.9.4a	Of-concern	Likely
Weeping Myall Woodlands	11.3.2	Of-concern	Likely

In addition to the above, the PMST report also identified the following flora and fauna species as occurring within the area:

- 10 EPBC Act-listed threatened flora species
- 27 threatened fauna species (including three classified as Critically Endangered and 10 as endangered)
- 13 migratory species (including one classified as Critically Endangered).

The PMST identified EPBC Act-listed threatened flora and fauna species with the potential to occur within the area are listed in Table 9.

Table 9: EPBC Act listed threatened flora and fauna communities

Scientific name	Common name	Threatened category	Likelihood
FLORA SPECIES			
<i>Arthraxon hispidus</i>	Hairy-joint Grass	Vulnerable	Likely
<i>Cadellia pentastylis</i>	Ooline	Vulnerable	Likely

Scientific name	Common name	Threatened category	Likelihood
<i>Cossinia australiana</i>	Cossinia	Endangered	Likely
<i>Dichanthium queenslandicum</i>	King Blue-grass	Endangered	Known to occur
<i>Dichanthium setosum</i>	Bluegrass	Vulnerable	Likely
<i>Leuzea australis</i> (syn. <i>Rhaponticum australe</i>)	Austral Cornflower, Native Thistle	Vulnerable	May
<i>Polianthion minutiflorum</i>	N/A	Vulnerable	May
<i>Solanum dissectum</i>	N/A	Endangered	Likely
<i>Solanum johnsonianum</i>	N/A	Endangered	Known to occur
<i>Xerothamnella herbacea</i>	N/A	Endangered	Known to occur
FAUNA SPECIES			
Birds			
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Vulnerable	May
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered	May
<i>Erythrotriorchis radiatus</i>	Red Goshawk	Endangered	May
<i>Falco hypoleucos</i>	Grey Falcon	Vulnerable	May
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Vulnerable	May
<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)	Vulnerable	Likely
<i>Grantiella picta</i>	Painted Honeyeater	Vulnerable	Known to occur
<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable	May
<i>Neochmia ruficauda</i>	Star Finch (eastern), Star Finch (southern)	Endangered	Likely
<i>Rostratula australis</i>	Australian Painted Snipe	Endangered	Likely
<i>Stagonopleura guttata</i>	Diamond Firetail	Vulnerable	May

Scientific name	Common name	Threatened category	Likelihood
<i>Turnix melanogaster</i>	Black-breasted Button-quail	Vulnerable	May
Mammal			
<i>Dasyurus hallucatus</i>	Northern Quoll	Endangered	Likely
<i>Macroderma gigas</i>	Ghost Bat	Vulnerable	May
<i>Nyctophilus corbeni</i>	Corben's Long-eared Bat, South-eastern Long-eared Bat	Vulnerable	May
<i>Petauroides volans</i>	Greater Glider (southern and central)	Endangered	Known to occur
<i>Petaurus australis australis</i>	Yellow-bellied Glider (south-eastern)	Vulnerable	Likely
<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Endangered	Likely
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Vulnerable	Foraging, feeding or related behaviour may occur within area
Reptile			
<i>Delma torquata</i>	Adorned Delma, Collared Delma	Vulnerable	May
<i>Denisonia maculata</i>	Ornamental Snake	Vulnerable	Known
<i>Egernia rugosa</i>	Yakka Skink	Vulnerable	Known
<i>Elseya albagula</i>	Southern Snapping Turtle, White-throated Snapping Turtle	Critically Endangered	May
<i>Furina dunmalli</i>	Dunmall's Snake	Vulnerable	May

Scientific name	Common name	Threatened category	Likelihood
<i>Hemiaspis damelii</i>	Grey Snake	Endangered	Likely
<i>Rheodytes leukops</i>	Fitzroy River Turtle, Fitzroy Tortoise, Fitzroy Turtle, White-eyed River Diver	Vulnerable	Likely
Snail			
<i>Adclarkia dawsonensis</i>	Boggomoss Snail, Dawson River Snail, Dawson Valley Snail	Critically Endangered	May
Migratory			
<i>Actitis hypoleucos</i>	Common Sandpiper	Migratory	May
<i>Apus pacificus</i>	Fork-tailed Swift	Migratory	Likely
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Vulnerable	May
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered	May
<i>Calidris melanotos</i>	Pectoral Sandpiper	Migratory	May
<i>Crocodylus porosus</i>	Salt-water Crocodile, Estuarine Crocodile	Migratory	Likely
<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo	Migratory	May
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Vulnerable	May
<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable	May
<i>Monarcha melanopsis</i>	Black-faced Monarch	Migratory	May
<i>Motacilla flava</i>	Yellow Wagtail	Migratory	May
<i>Myiagra cyanoleuca</i>	Satin Flycatcher	Migratory	Known to occur
<i>Rhipidura rufifrons</i>	Rufous Fantail	Migratory	Known to occur

Appendix D – Summary of legislative considerations

A summary of legislation potentially applicable to the project is provided below in Table 10 below. Further design and detailed investigations and assessment will be required to confirm the appropriate approval pathway for the project.

Table 10: Summary of legislation

Legislation	Summary
Commonwealth legislation	
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	<p>The EPBC Act is the centrepiece of Commonwealth environmental laws. It provides a legal framework to protect, and manage nationally, and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as Matters of National Environmental Significance (MNES).</p> <p>MNES include:</p> <ul style="list-style-type: none"> • The world heritage values of a declared world heritage property • The national heritage values of a declared national heritage place • The ecological character of a declared Ramsar wetland (wetlands of international importance) • Listed threatened species and ecological communities • Listed migratory species • Nuclear actions (including uranium mining) • Commonwealth marine areas • The Great Barrier Reef Marine Park • A water resource, in relation to coal seam gas development and large coal mining development. <p>The EPBC Act is administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) and establishes a process for environmental assessment and approval of proposed actions that have, will have, or are likely to have a significant impact on MNES.</p> <p>If a project may cause a significant impact on an MNES, the project must be referred to DCCEEW for assessment of the potential impacts. The Minister will decide whether the project is:</p> <ul style="list-style-type: none"> • Not a controlled action: the project does not need to be assessed further • Not a controlled action ‘particular matter’: the project does not need to be assessed further, providing the action is completed in accordance with conditions that are supplied with the decision • A controlled action: the project will need to be assessed against the EPBC Act, through one of several processes available. <p>Ecological investigations and subsequent significant impact assessment will be completed to understand the presence of, and potential impacts on, MNES. Outcomes of these investigations will determine the requirement for referral to the Commonwealth Minister for the Environment.</p>

Legislation	Summary
<i>Native Title Act 1993</i>	<p>The <i>Native Title Act 1993</i> (NT Act) (Cth) establishes a national framework for the protection and recognition of Native Title, including by conferring on Indigenous people who hold (or claim to hold) Native Title rights and interests in respect of any land or waters, the right to be consulted with and in some cases to participate in decisions about activities proposed to be undertaken.</p> <p>The final corridor intersect two native title claims:</p> <ul style="list-style-type: none"> • Wulli Wulli People #3 Claim Area (QCD2017/011) • Gaangalu Nation People Claim Area (QCD2024/001). <p>Under the NT Act (Cth), Native Title cannot be claimed on freehold land as it is extinguished over the area. Where the corridor intersects roads that were declared as roads on or before 23 December 1996, Native Title is extinguished and is not required to be considered.</p> <p>On land where native title exists, Powerlink must comply with the requirements of the NT Act (Cth) to secure an easement for the transmission line. Construction of the transmission line is covered by processes under section 24KA or possibly by an Indigenous Land Use Agreement. Section 24KA validates future acts that consist of the construction, and operation of public infrastructure and suspend the native rights over the land for the duration of the easement. Therefore, the legislative requirements under the NT Act (Cth) are low risk to the project.</p>
State legislation	
<i>Aboriginal Cultural Heritage Act 2003</i>	<p>The <i>Aboriginal Cultural Heritage Act 2003</i> is administered by Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism (DWATSIPM) and aims to provide effective recognition, protection, and conservation of Aboriginal cultural heritage.</p> <p>It establishes the processes for managing activities that may cause potential harm to Aboriginal cultural heritage, which is identified through the Aboriginal and Torres Strait Islander Cultural Heritage (ATSICH) Database and Register and the <i>Aboriginal Cultural Heritage Act 2003 Duty of Care Guidelines</i>.</p> <p>Should the project be considered to pose a high risk to Aboriginal cultural heritage, engagement with the relevant cultural heritage parties for the area is likely to be required. It may also necessitate preparation of a Cultural Heritage Management Plan (CHMP) or Cultural Heritage Management Agreement (CHMA).</p> <p>Activities which pose a high risk of impact to Aboriginal cultural heritage that may apply to this project include:</p> <ul style="list-style-type: none"> • Works in, or within proximity to registered Aboriginal cultural heritage sites or objects • Works in areas with little or no previous ground disturbance • Works in proximity to water features. <p>Powerlink is in the process of undertaking engagement with the relevant Traditional Owner groups to discuss the project and its potential impacts.</p>
<i>Acquisition of Land Act 1967</i>	<p>The <i>Acquisition of Land Act 1967</i> is administered by Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (DRMMRRD) and sets out the processes for compulsory and voluntary acquisition of land for a public purpose by a constructing authority. Powerlink may acquire freehold land or register an easement over land for the transmission line. Land may be acquired either by voluntary agreement for easements or other tenures required or, where agreement cannot be reached, by compulsory resumption of land.</p>

Legislation	Summary
<i>Biosecurity Act 2014</i>	<p>The <i>Biosecurity Act 2014</i> (Biosecurity Act) is administered by the Department of Primary Industries (DPI) and provides a biosecurity system framework which aims to minimise biosecurity risk, and facilitate responses to biosecurity impacts, to ensure the safety, and quality of agricultural inputs, and to align the state's management of biosecurity risk and other requirements for plant and animal responses to biosecurity risk with federal and international obligations. The Biosecurity Act also aims to manage emerging endemic, and exotic pests, and diseases as well as the transfer of diseases between humans and animals and contaminants in carriers.</p> <p>Under the Biosecurity Act, a general biosecurity obligation is placed on all persons to undertake all reasonable and practicable measures to prevent or minimise biosecurity risk. Additionally, the movement of biosecurity matter must comply with movement restrictions associated with each relevant biosecurity zone, and biosecurity instrument permits are required for the movement of biosecurity matter which cannot comply with movement restrictions.</p>
<i>Environmental Offsets Act 2014</i>	<p>The purpose of the <i>Environmental Offsets Act 2014</i> (EO Act) is administered by Department of Environment, Tourism, Science and Innovation (DETSI) and is to counterbalance the significant residual impacts of particular activities on prescribed environmental matters through the use of environmental offsets.</p> <p>Prescribed environmental matters are described under the EO Act as a MNES, Matters of State Environmental Significance (MSES) and Matters of Local Environmental Significance (MLES).</p> <p>An environmental offset may be required as a condition of development approval, where following consideration of avoidance and mitigation measures, a prescribed activity is likely to result in a significant residual impact on a prescribed environmental matter. Once the administering authority has decided that a prescribed activity is required to provide an offset, the environmental offset is required to be delivered in accordance with the EO Act, the <i>Environmental Offsets Regulation 2014</i> and the Queensland Environmental Offsets Policy. The desktop assessment has identified that MNES and MSES are potentially present within the recommended corridor, however this will need to be confirmed during future phases of the project through field surveys.</p> <p>To avoid duplication between jurisdictions, State and Local Governments can only impose an offset condition in relation to a prescribed activity if the same, or substantially the same impact, or substantially the same matter has not been subject to assessment under the EPBC Act.</p> <p>It is important to note that advice from Queensland Treasury is that the EO Act does not apply to the designation of premises for development of infrastructure, however the designation decision can still apply compensatory measures/requirements akin to an offset.</p>
<i>Electricity Act 1994</i>	<p>The <i>Electricity Act 1994</i> is administered by the Queensland Treasury, requires that all electricity industry participants must ensure a safe, efficient, and reliable supply of electricity, as well as ensure that the supply of electricity is carried out in an environmentally sound manner.</p> <p>Section 31 of the <i>Electricity Act 1994</i> states that the transmission entity must properly account for the environmental effect of its activities under the transmission authority. Powerlink holds a transmission licence in Queensland and is required to develop its network to meet the security, and reliability standards of the National Electricity Rules, the <i>Electricity Act 1994</i> and the terms of its transmission licence.</p> <p>The legislative requirements of the <i>Electricity Act 1994</i> are standard to Powerlink projects and pose a low risk to the construction and operation of the transmission line.</p>
<i>Electrical Safety Act 2002</i>	<p>The <i>Electrical Safety Act 2002</i> is administered by the Department of State Development, Infrastructure and Planning (DSDIP) and seeks to regulate electricity works to prevent death, injury or destruction caused by electricity. The transmission line must be designed in compliance with the requirements outlined under the <i>Electrical Safety Act 2002</i>. These requirements are standard to Powerlink processes and are considered to have a low risk to the project.</p>

Legislation	Summary
<i>Environmental Protection Act 1994</i>	<p>The <i>Environmental Protection Act 1994</i> (EP Act) is administered by Department of Environment, Tourism, Science and Innovation (DETSI) and aims to protect Queensland's environment, while allowing for development that improves the total quality of life, both now and in the future.</p> <p>The EP Act regulates activities that will or may have the potential to cause environmental harm and prescribes several mechanisms to ensure that objectives are met. The two primary environmental duties that apply to everyone in Queensland are:</p> <ul style="list-style-type: none"> • General environmental duty – a person must not carry out any activity that causes, or is likely to cause environmental harm, unless all reasonable and practicable measures to prevent or minimise the harm have been taken. Environmental harm is defined in Section 14 of the EP Act as any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value and includes environmental nuisance. • Duty to notify of environmental harm – a person must inform the administering authority and landowner or occupier when an incident has occurred that may have caused or threatens serious or material environmental harm that is not authorised. <p>The EP Act also provides the power to administering authorities to order the actions to be taken to improve environmental performance, conduct audits, and environmental evaluations of activities, approve environmental management programs and impose penalties or prosecute persons for non-compliance with the requirements of the EP Act.</p> <p>The EP Act is supported by the following subordinate legislation:</p> <ul style="list-style-type: none"> • <i>Environmental Protection Regulation 2019</i> (EP Regulation) • <i>Environmental Protection (Air) Policy 2019</i> (EPP (Air)) • <i>Environmental Protection (Noise) Policy 2019</i> (EPP (Noise)) • <i>Environmental Protection (Water and Wetland Biodiversity) Policy 2019</i> (EPP (Water and Wetland Biodiversity)).
<i>Fisheries Act 1994</i>	<p>The <i>Fisheries Act 1994</i> (Fisheries Act) is administered by DPI and governs the management of fisheries, declared fish habitat areas and marine plants. Works which may cause disturbance to 'waterways' as defined under the Fisheries Act can be subject to assessable operational work for waterway barrier works, unless construction complies with the conditions under the 'Accepted development requirements for operational work that is constructing or raising waterway barrier works.</p> <p>Should any works within a waterway not comply with the accepted development requirements, a development permit is ordinarily required under the <i>Planning Act 2016</i>. However, if the project is granted an Infrastructure Designation, operational work for waterway barrier works will be considered accepted development and will not require a development permit.</p>
<i>Human Rights Act 2019</i>	<p>The <i>Human Rights Act 2019</i> is administered by the Department of Justice and requires Powerlink to act or make decisions that are compatible with human rights, including property rights and cultural rights, as well as to give proper consideration to human rights in making decisions.</p>
<i>Land Act 1994</i>	<p>The <i>Land Act 1994</i> is administered by the Department of Natural Resources and Mines, Manufacturing and Rural and Regional Development (DRMMRRD) and governs the allocation and management of land for development. The <i>Electricity Act 1994</i> provides exemptions to the <i>Land Act 1994</i> for works by transmission entities. Transmission entities are entitled to take necessary action in publicly controlled places (such as unallocated State land) to provide or supply electricity under section 101 of the <i>Electricity Act 1994</i>, as well as undertake works on road reserves through written agreement from the road authority under section 102.</p>

Legislation	Summary
<i>Nature Conservation Act 1992</i>	<p>The <i>Nature Conservation Act 1992</i> (NC Act) is administered by DETSI and is the primary legislation governing the protection and management of native wildlife, habitat and protected areas in Queensland.</p> <p>The protected plants flora survey trigger map identifies high risk areas for protected plants to occur and must be used to determine whether a targeted flora survey is required for a particular area. High risk areas are those in which endangered, vulnerable, threatened or near threatened flora is known or likely to exist.</p> <p>Where clearing is required in an area containing a protected plant species, a clearing permit must be obtained from DESI.</p>
<i>Planning Act 2016</i>	<p>The <i>Planning Act 2016</i> (Planning Act) is administered by the Department of State Development, Infrastructure and Planning (DSDIP) and establishes a system of land use planning and development assessment prescribed under the Planning Regulation 2017 (Planning Reg). The proposed project is considered 'Electricity Operating Works', which is considered 'infrastructure' and therefore prescribed development under the Planning Reg.</p> <p>Under the Planning Act, the Planning Minister is the only minister with the power to designate land for infrastructure. The 'Minister's Guidelines and Rules' outlines the process for making a ministerial designation.</p> <p>An approval for a Ministerial Infrastructure Designation (MID) will require submission of an EAR that includes requirements about works for the infrastructure (such as the height, shape, bulk, landscaping, or location of works), the use of premises including access and ancillary uses, or lessening the impact of the works or use (such as environmental management procedures).</p> <p>Under section 44 of the Planning Act, infrastructure that is designated is considered accepted development and will not require further approvals under the Planning Act; with the exception of building work approval under the <i>Building Act 1975</i>.</p> <p>A MID will be required for construction of the transmission line.</p>
<i>Queensland Heritage Act 1992 (QLD)</i>	<p>In accordance with Part 1 of the <i>Queensland Heritage Act 1992</i>, 'historical' (i.e. non-Aboriginal or Torres Strait Islander places) cultural heritage is provided conservation for the benefit of the community and future generations.</p> <p>Under Parts 4 and 11 of this Act, historical cultural heritage places considered to hold state significance are entered in the Queensland Heritage Register, while places of local heritage significance may be listed by local governments in their respective local heritage register and/or planning schemes.</p> <p>A desktop assessment will be conducted to identify if historical cultural heritage places are present within the final corridor.</p>
State Planning Policy	<p>The State Planning Policy (SPP) identifies matters of State interest requiring protection and enhancement. The SPP is at the top of the planning hierarchy in Queensland and is the overarching policy for all other regional and local planning instruments. The SPP States that the SPP applies to the extent relevant, when designating premises for infrastructure under the Planning Act and development applications.</p>

Legislation	Summary
<i>Transport Infrastructure Act 1994</i>	<p>The <i>Transport Infrastructure Act 1994</i> is administered by the Department of Transport and Main Roads (DTMR) and regulates the management of State-controlled road networks across Queensland.</p> <p>Under section 50 of the <i>Transport Infrastructure Act 1994</i>, construction, maintenance, and operation of ancillary works and encroachments within State-controlled roads (e.g. placement of a transmission line over the road) can only be completed where written approval has been granted from the DTMR.</p> <p>Under section 33 of the <i>Transport Infrastructure Act 1994</i>, written approval is required from the DTMR to carry out road works on a State-controlled Road (SCR) or interfere with a SCR or its operation. This may include where road works to a Council Road interferes with a SCR or its operations.</p> <p>Under section 62 of the <i>Transport Infrastructure Act 1994</i>, written approval is required from DTMR to locate a permitted access on a SCR. A decision of access approval may include conditions or restrictions on the location or use of the permitted road access, type or number of vehicles to use the permitted road access location.</p> <p>Under the <i>Transport Infrastructure (Rail) Regulation 2006</i> permission from the railway manager (Queensland Rail) is required to take over dimensional road loads across Queensland Rail infrastructure (e.g. rail level crossings and rail bridges).</p>
<i>Vegetation Management Act 1999</i>	<p>The <i>Vegetation Management Act 1999</i> (VM Act) is governed by the DRMMRRD and seeks to manage native vegetation across Queensland. Regulated Vegetation Mapping identifies categorised areas of remnant vegetation in Queensland and is used to establish whether clearing of native vegetation is considered assessable development requiring a permit.</p> <p>Clearing of any relevant remnant or regulated regrowth vegetation constitutes operational work under schedule 10 of the <i>Planning Regulation 2017</i>, which will require development approval unless a vegetation clearing code or exemption applies. Under Section 22A of the VM Act, an application for operational work, including applications where DRMMRRD is a concurrence agency, cannot be accepted as properly made unless the Chief Executive is satisfied that the development is for a relevant purpose. Exemptions exist for electricity infrastructure were associated with an infrastructure designation.</p> <p>Any infrastructure designation or development application will need to demonstrate that Powerlink has sought to reduce the impacts of vegetation clearing through the hierarchy of avoid, minimise and mitigate. Where a significant residual impact remains, an offset, or compensatory measures may be required.</p>
<i>Water Act 2000</i>	<p>The <i>Water Act 2000</i> (Water Act) is administered by the Department of Local Government, Water and Volunteers (DLGWV) and provides a legislative framework for the sustainable use, allocation, and management of water resources in Queensland and regulates activities occurring within designated watercourses under the Water Act.</p> <p>The Watercourse Identification Map categorises water features as either a designated watercourse, drainage feature, downstream limit of a watercourse or lake and is used to determine the assessment requirements for undertaking activities within a watercourse. Activities including excavating, filling, or destroying native vegetation within a watercourse may require approval under the Water Act in the form of a riverine protection permit. Powerlink is an approved entity exempt from requiring a permit if the self-assessment guidelines under DRMMRRD's 'Riverine protection permit exemption requirements' are followed.</p>

Legislation	Summary
Regional Plans	<p>The final corridor is subject to the Central Queensland Regional Plan 2013. The plan was implemented in 2013 to provide policy responses to resolve the region's most important issues affecting its economy and the liveability of its towns. The plan specifically provides direction to resolve competing state interests relating to the agricultural and resources sectors, and to enable the growth potential of the region's towns.</p> <p>The plan's regional policies address the emerging regional issues of land use competition between the agricultural and resources sectors, and the need to protect areas required for the growth of towns.</p> <p>The plan also discusses other state interests relevant to land use planning in the region, including housing and liveable communities, economic growth, environment and heritage, and hazards and safety.</p> <p>The transmission line and substation are consistent with the intent of the plan, to provide continued distribution capacity for the region.</p>
Local Laws	<p>The project is located within Banana Shire Council Local Government Area. Local Government Areas are subject to individual Local Planning Instruments under the Planning Act, as well as a range of local laws under the <i>Local Government Act 2009</i>.</p> <p>Local laws under the <i>Local Government Act 2009</i> are used to regulate matters specific to LGAs, particularly relating to pests and weeds, use of Local Government roads and nuisances such as noise and dust. While the approvals framework for this project gives rise to legislative and regulatory exemptions, the local laws imposed by the relevant LGAs will still apply and may trigger permits required to be obtained for certain activities. The local laws that may apply to the project are provided as follows:</p> <ul style="list-style-type: none"> • Local Law No. 3 (Community and Environmental Management); and • Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads). <p>Once the land becomes designated as part of the MID process, development relevant to the designation becomes accepted development under the local planning scheme, and, further planning approval is not required. However, the Minister may have regard to the Local Government assessment framework and decisions may be influenced by zoning, land-use intent, and local ordinances and by-laws. Additionally, the local council will be consulted with during the MID process with regards to impacts on Local Government-controlled roads, prior to the commencement of construction.</p>

Appendix E – Acronyms

Acronym	Description
Biosecurity Act	<i>Biosecurity Act 2014</i>
Cth	Commonwealth
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DCSR	Draft Corridor Selection Report
DETSI	Department of Environment, Tourism, Science, and Innovation
DLGWV	Department of Local Government, Water and Volunteers
DPI	Department of Primary Industries
DRMMRRD	Department of Natural Resources and Mines, Manufacturing and Rural and Regional Development
DSDIP	Department of State Development , Infrastructure and Planning
DTMR	Department of Transport and Main Roads
DWATSIPM	Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism
EAR	Environmental Assessment Report
EMF	Electric and Magnetic Fields
EO Act	<i>Environmental Offsets Act 2014</i>
EP Act	<i>Environmental Protection Act 1994</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FCSR	Final Corridor Selection Report
Fisheries Act	<i>Fisheries Act 1994</i>
GW	Gigawatt
Ha	Hectare
Km	Kilometre
kV	Kilovolt
M	Metre

Acronym	Description
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
MW	Megawatt
NT Act (Cth)	<i>Native Title Act 1993 (Cth)</i>
NER	National Electricity Rules
NC Act	<i>Nature Conservation Act 1992</i>
MID	Ministerial Infrastructure Designation
Planning Act	<i>Planning Act 2016</i>
Powerlink	Powerlink Queensland
PMST	Protected Matters Search Tool
RE	Regional Ecosystem
REZ	Renewable Energy Zone
RWE	RWE Renewables Australia
SCL	Strategic Cropping Land
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SMP	Species Management Program
SPP	State Planning Policy
TECs	Threatened Ecological Communities
VM Act	Vegetation Management Act 1999
Water Act	Water Act 2000

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