Western Victoria
transmission network project

FACT SHEET JUNE 2021

Transmission corridor

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Introduction

The project is a critical upgrade of the state's transmission network which will help ensure Victoria's successful transition from coal generated energy to sustainable, affordable and reliable renewable energy. It will connect large scale wind and solar in the west into the grid to power more than half a million homes across Victoria.

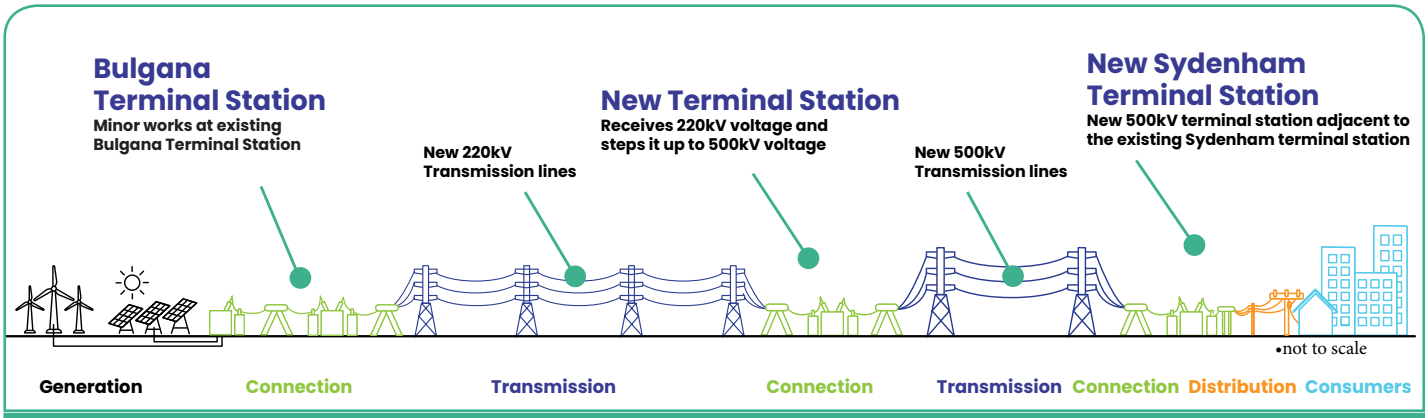
The project includes a new high voltage transmission line and terminal stations. The project also includes minor upgrade works at existing terminal station sites. This fact sheet relates to the identification of least constrained corridor for overhead transmission lines. Technology solutions including partial undergrounding are being investigated. The Minister for Planning has requested that the Environment Effects Statement (EES) evaluate the feasibility of project alternatives including constructing the project either fully or partially underground. This work is currently being undertaken.

Purpose of this fact sheet

This fact sheet outlines:

- The option being investigated within the single corridor.
- How the corridors were identified.
- Narrowing down the Area of Interest.
- Transmission corridor map.
- What does the corridor look like?
- Next steps.

Within the identified corridor we are investigating the following option:



New overhead double circuit 220kV transmission line between the existing Bulgana Terminal Station and a new terminal station to the north of Ballarat. From there to the proposed terminal station at North Sydenham, a new overhead double circuit 500kV high voltage transmission line will be required.*

*As part of the EES, Ausnet Services is investigating the option to increase the amount of energy unlocked in Western Victoria, by changing the voltage of the 220kV section between Bulgana and Waubra to 500kV. It has been identified in the Renewable Energy Zone Development Plan Directions Paper and is being actively considered by the Victorian Government. Further information on the REZ priorities can be found https://tinyurl.com/azaxc4rf.

If this option is progressed for this project, the terminal station to be located to the north of Ballarat may not be required for this project.

How the corridors were identified

Following consideration of community feedback, along with early investigations, we narrowed down the area of interest to multiple corridors in February 2021. Extensive community consultation and technical investigations have continued since then. The least constrained corridor has now been identified based on:

- Consultation with landholders and local communities.
- Technical assessment by environmental specialists.
- Cost to electricity consumers – infrastructure cost is paid for by the consumer.

As part of the corridor selection process, independent experts assessed the feasibility of using the Western Highway as a corridor for either underground or overhead. The highway passes through major towns including Melton, Bacchus Marsh, Ballan and Ballarat. West of Ballarat, the highway passes through Beaufort and Ararat.

The transmission line cannot follow the Western Highway through several of these sections because there is not enough room in the existing easement for a transmission line, with only 10 to 30 metres available in large sections. In other areas, the transmission line's proximity to the highway would be a significant safety risk. In some sections, significant deviations would need to occur to avoid existing reservoir infrastructure, affecting adjacent properties and residences. The highway would be subject to significant and lengthy lane closures, both during construction and when maintenance works are undertaken.

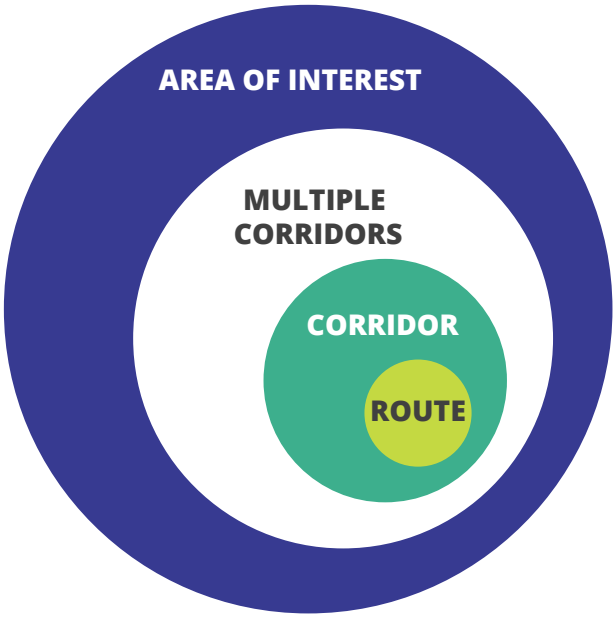
Narrowing down the Area of Interest

Area of Interest - A broad geographical area was investigated to understand the constraints and opportunities to identify corridors for further investigation.

Multiple Corridors - Based on constraints and opportunities across the area of interest multiple corridors were identified for further investigation.

Corridor - A single corridor was identified based on additional assessment.

Route - Further studies and engagement will be conducted to identify a final route within the corridor.



1 Assessment of Area of Interest

An Area of Interest extends between Bulgana and Sydenham and is generally bound to the north and south by State and National Parks. The area was screened for potential corridors for transmission lines based on a high level constraints analysis.

2 Consultation

Consultation on the project and the area of interest commenced with:

- Landholders.
- Local community members and groups.
- Government departments.
- Other interested parties.

People were asked to provide information for use in refining the Area of Interest. The feedback was very clear that people wanted the project to minimise impact on the surrounding environment and communities, and to ensure existing land use was maintained, especially farmland.

3 Multiple Corridors

Technical specialists including engineers and scientists completed studies to assess the values and areas of sensitivity within and surrounding the corridors. The area of interest was narrowed down to multiple corridors for further investigation.

Opportunities - areas where there was potential to co-locate with existing infrastructure or development to minimise impact such as roads and existing transmission lines.

Constraints - areas that should be avoided, such as heavily populated areas and areas of environmental or cultural significance.

4 Corridor options assessment

Further consultation was undertaken on the multiple corridors as well as additional technical work including:

- The formation of a community consultation group.
- Community information sessions.
- Further site investigations.

Baseline studies contributed to our understanding of the area of interest and constraints. This information was analysed to understand the key differences between the shortlisted corridors. Technical expert advice about the key differences informed identification of the least constrained corridor including.

- Amenity.
- Landscape and Visual.
- Land use and Planning.
- Cultural Heritage.
- Heritage.
- Biodiversity.

Seventeen baseline studies are currently being undertaken as part of the EES, this work informed the corridor assessment process.

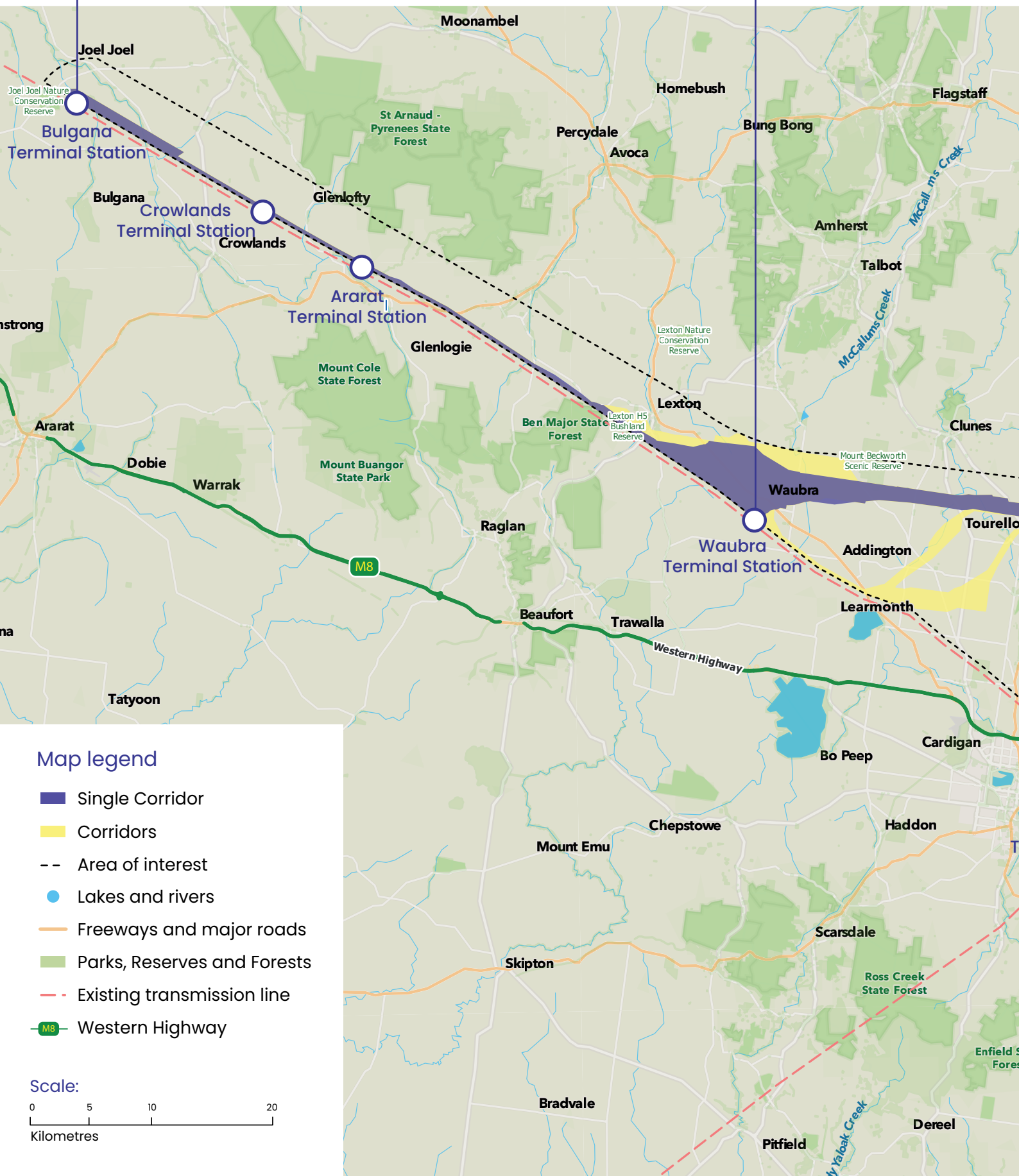
Agricultural land, predominately broad acre, livestock and potato farms, are impacted by all corridor options. Potato farming and the use of irrigators currently takes place safely under 220kV lines. These same practices can be continued under 500kV lines. To ensure impacts are kept to a minimum, we need to continue to engage with landholders to further understand how their farms are used, as we seek to avoid or minimise impacts.

In terms of potential impacts to ecological values in addition to those mentioned in the table above, both corridors in section 4 contain endangered ecological vegetation communities with Plains Grassland, Grassy Woodland and Plains Grassy Woodland the most widely spread. The Environment Protection and Biodiversity Conservation Act 1999 lists particular native grassland and grassy woodland communities, some of which occur in the area, as critically endangered. We will seek to avoid and minimise impacts to grassland by siting towers to minimise impact and span the most environmentally sensitive areas.

Single corridor - Area of Interest

Section 01
Bulgana to Waubra

Section 02
Waubra to Glendonald



Map legend

- Single Corridor
- Corridors
- Area of interest
- Lakes and rivers
- Freeways and major roads
- Parks, Reserves and Forests
- Existing transmission line
- M8 Western Highway

Scale:

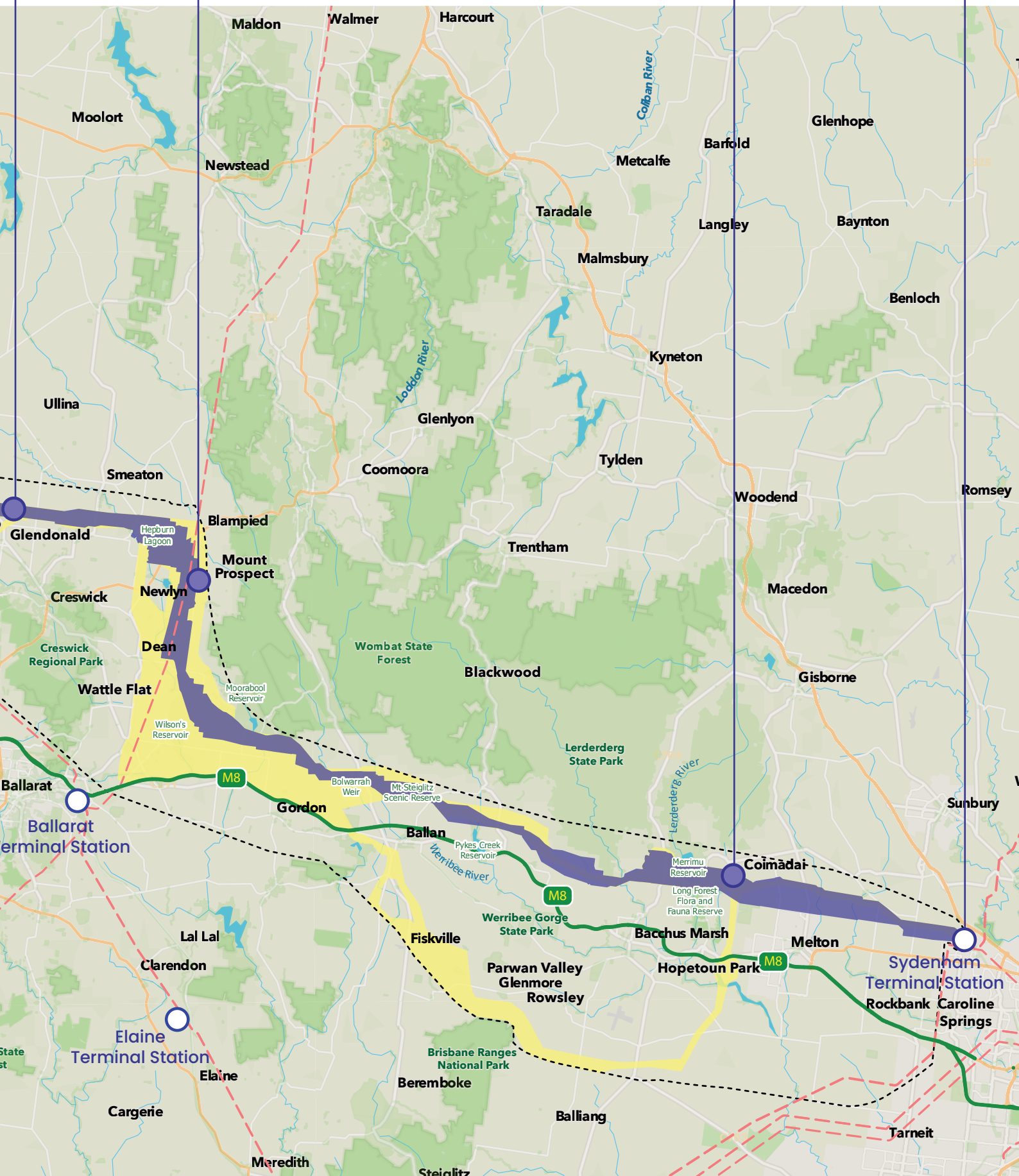
0 5 10 20

Kilometres

Section 03
Glendonald to
Mount Prospect

Section 04
Mount Prospect
to Long Forest

Section 05
Long Forest to
Sydenham



What does the corridor look like?

We identified the least constrained option based on current information including environmental, constructability and technical aspects. Within this corridor, multiple route options are being considered to further reduce impacts based on landowner engagement, constructability assessments and further technical studies.

After analysing the advantages and disadvantages of each corridor, the following corridor is least constrained based on current information:

Section 1: Bulgana to Waubra.

Section 2: Waubra to Glendonald.

Section 3: Glendonald to Mount Prospect.

Section 4: Mount Prospect to Long Forest.

Section 5: Long Forest to Sydenham.

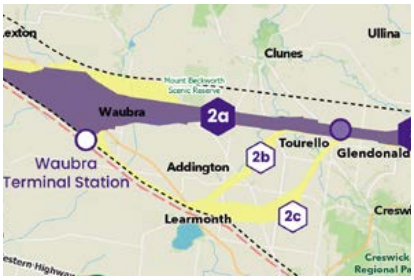
We will progress this corridor through the EES. Following further landowner engagement and community consultation, we expect that a conceptual route will be announced in late 2021. The route will not be finalised until the Planning Minister's assessment is received and any matters raised by the Minister are addressed.

A summary of the advantages and disadvantages for each corridor is provided below, options highlighted in green are being progressed.

= progressed

= no longer under current investigation

Sections and corridors considered	Advantages	Disadvantages
Section 1: Bulgana to Waubra The corridor from Bulgana terminal station to Lexton follows an existing easement so in this area there is only one corridor option. 	**Corridor 1: Bulgana to Waubra** ✓ Keeping the new transmission line close to the existing line minimizes the impact on agricultural land. ✓ Takes into consideration community feedback that existing infrastructure corridors should be utilised where possible.	✕ Some landholder concerns about additional infrastructure on their properties causing incremental impacts.

Sections and corridors considered	Advantages	Disadvantages
Section 2: Waubra to Glendonald 	**Corridor 2a: Waubra to Glendonald** ✓ Most direct route if end-to-end 500 kV transmission line required. ✓ Traverses the least amount of intensely cultivated farmland.	✗ Does not follow the existing transmission line towards Learmonth.
	Corridor 2b: Waubra via Learmonth to Tourello ✓ Follows existing line longer, reducing impacts on agricultural land. ✓ Takes into consideration community feedback that existing infrastructure corridors should be utilised where possible.	✗ Traverses intensely cultivated farmland. ✗ Impacts on endangered vegetation communities. ✗ Threatened species associated with wetlands less than 500m from corridor.
	Corridor 2c: Waubra via Learmonth, to the existing stock route to Glendonald ✓ Less agricultural land traversed by following the existing stock route however to get to the stock route more intensely cultivated land is impacted compared to option 2b.	✗ Impacts on endangered vegetation communities including high quality grassland in the stock route. ✗ Impacts on areas of Aboriginal cultural heritage sensitivity and historic heritage sites/places.
Section 3: Glendonald to Mount Prospect 	**Corridor 3a: Glendonald to Mount Prospect** ✓ Provides options around Hepburn lagoon. ✓ Minimises impact on agricultural land. ✓ Reduces visual impact.	✗ Potential for visual impacts to the lagoon from the road. ✗ Potential impact on migratory birds that utilise Hepburn lagoon for habitat.
	Corridor 3b: Glendonald via Newlyn North to Mount Prospect ✓ Provides an option for a more direct southern connection.	✗ Places a number of houses between existing and new transmission lines. ✗ Greater impact on farming operations.

Sections and corridors considered	Advantages	Disadvantages
Section 4: Mount Prospect to Long Forest 	**Corridor 4a: Mount Prospect to Dean, North of Bacchus Marsh to Long Forest** ✓ Avoids the Parwan Valley and Rowsley Scarp identified as state significant landscapes in the South West Victoria Landscape Assessment Study. ✓ Traverses mixed farm land and predominately grazing land. ✓ Utilises existing transmission line to greatest possible extent. ✓ Provides a more direct route.	✗ Traverses the Significant Landscape Overlay (Scenic Hilltops and Ridge Line Areas) protecting scenic values of the escarpment south of Lerderderg Gorge State Park. ✗ Potential impacts to endangered ecological community: Grey box grassy woodland, occurs adjacent to Coimadai, Merrimu Reservoir and the Lerderderg River. ✗ Traverses the southern extent of the Lerderderg State Park. ✗ Traverses a property protected by a local heritage overlay. ✗ Traverses intensively farmed land between Dean and Mount Prospect.
	Corridor 4b: Mount Prospect to Dean, South of Bacchus Marsh to Long Forest ✓ Traverses mixed farming land and predominantly grazing land.	✗ Watercourses and stony rises of the volcanic plain west and south west of Melton are prospective for Aboriginal cultural heritage along and adjacent to Werribee River and Parwan Creek. ✗ Remnant patches of critically endangered grassland and areas of known habitat for Swift Parrots. ✗ Wedge-tailed eagles occur throughout the area of interest with clusters in the Parwan Valley and along the Rowsley Scarp. ✗ Traverses broadacre cropping land near Balliang. ✗ Traverses the Parwan Valley and Rowsley Scarp, identified as state significant landscapes in the South West Victoria Landscape Assessment Study. ✗ To avoid impacting on the Bacchus Marsh airfield, the corridor traverses a heritage listed homestead and outbuildings, listed on the Victorian Heritage register and protected by a local heritage overlay. ✗ Traverses intensively farmed land between Dean and Mount Prospect. ✗ Highly erosive soils that pose issues for construction.

Sections and corridors considered	Advantages	Disadvantages
Section 5: Long Forest to Sydenham There is only one corridor east of Long Forest, north of Melton to connect into the new terminal station adjacent to the Sydenham Terminal station that avoids the urban growth zone and the MacPherson Park Regional sporting facilities.  	**Corridor 5: Long Forest to Sydenham** ✓ Avoids built up area of Melton and urban growth boundary.	✗ Patches of critically endangered grasslands and associated critically endangered species.

Next steps

The project is preparing technical information for the EES.

We will be in contact with all landholders who own property within the least constrained corridor over the coming month. We respect your privacy and land ownership and are committed to working with you to minimise disturbance to your property and interruptions to your business activities.

Where specialist field surveys are required on private property, you will be contacted by an AusNet Services representative to seek permission to access your property and conduct the necessary surveys.

We commit to avoiding and minimising disturbance to your land and business activities. We will agree conditions of entry with you and document them in a land access agreement.

Cooperation in allowing access to your land for specialist studies will provide valuable information about existing farming operations, environmental values and potential effects, and importantly, how they might be avoided or managed.

Stay involved

We'll continue to work hard to encourage community input and involvement and learn from local people as we progress this important step in transitioning to renewables. Further detailed information on the project including additional factsheets can be found at westvictnp.com.au.

If you need further information or clarification about the single corridor or on the project in general, please call 1300 360 795 or email **info@westvictnp.com.au**. To register for updates, visit westvictnp.com.au.