

Transmission update

CAG out of session briefing - 16 March 2021

We acknowledge the Traditional Owners of the lands on which we all meet today and pay our respects to their elders past, present and future.

We also recognise and pay our respects to the Gunaikurnai people as Traditional Owners of the area in which the Star of the South would be located.

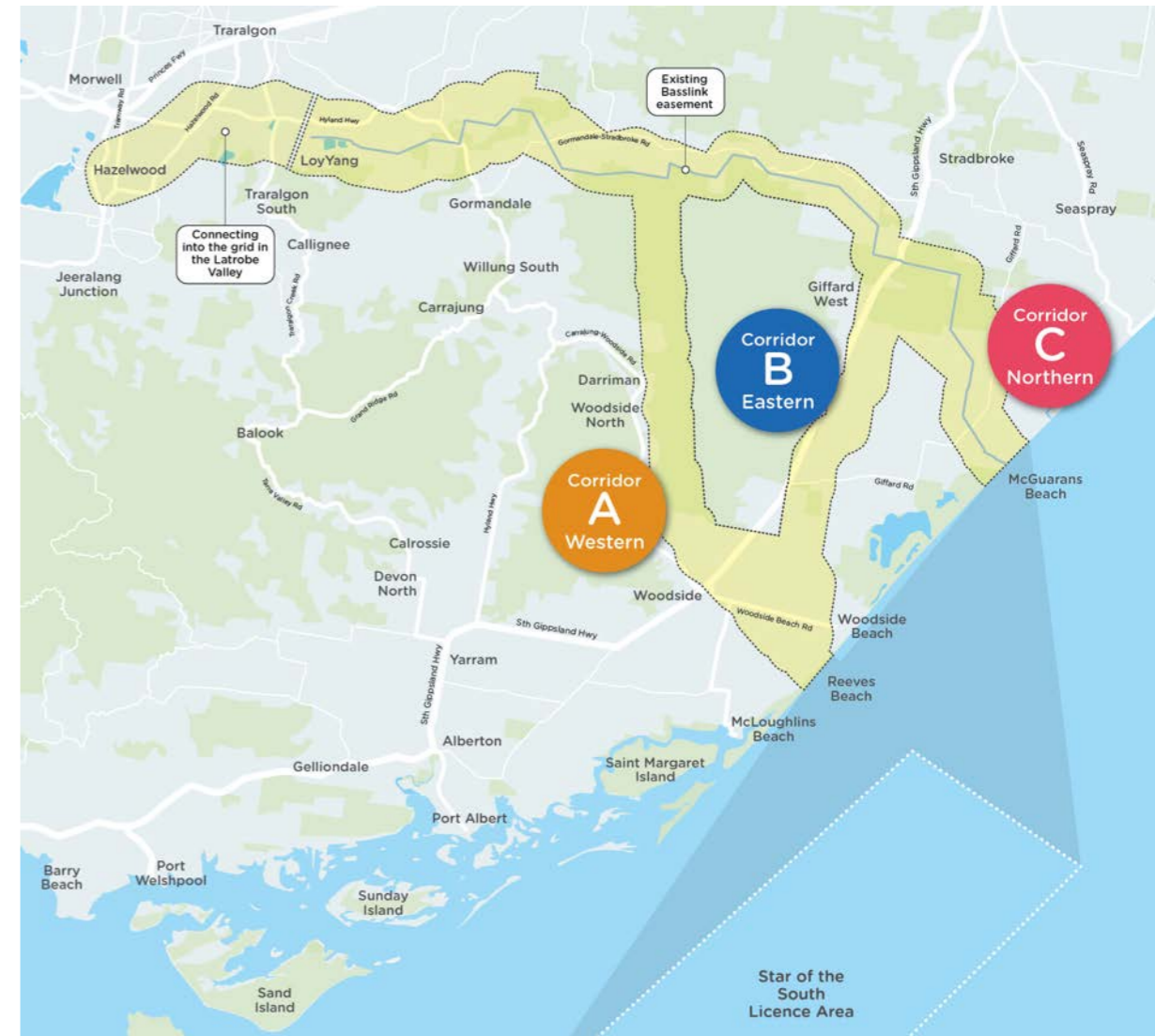
Transmission route

We've selected a route to progress through detailed planning and design



Recap - transmission investigations

- Initial study in 2019 identified three route options which could be suitable for underground cables
- Landholder engagement on all three options to understand sentiment and any concerns
- Stakeholder and community engagement to gather local knowledge and perspectives
- Desktop environmental studies
- Field studies – soil testing, feature survey, flora and fauna surveys (spring), marine ecology and seabed studies
- Multi Criteria Analysis to assess all options against key criteria.



We investigated three transmission options routes across 2019-20

What we heard from the community

Overall, respondents wanted us to select a transmission route with the **least impact on the environment, farms and local communities.**

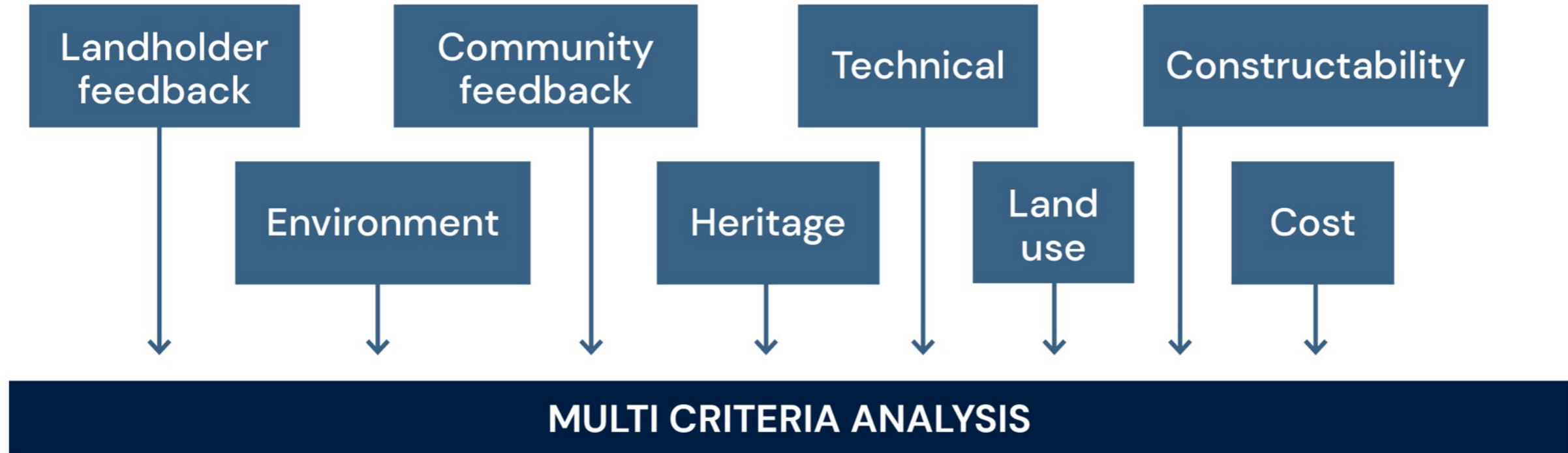
Key themes:

- Support for underground
- Choose least environmental impact
- Choose least impact to farms and private landholders
- Design to avoid native vegetation removal
- Support for following Basslink as much as possible
- Consider opportunities to share infrastructure with other projects
- Maintain recreational use of Reeves Beach
- Recognition that practical considerations such as constructability, access, cost and efficiency will be an important part of the decision



People asked that we select a transmission route with the least impacts

Multi Criteria Analysis



We used an evidence-based approach to analyse each option

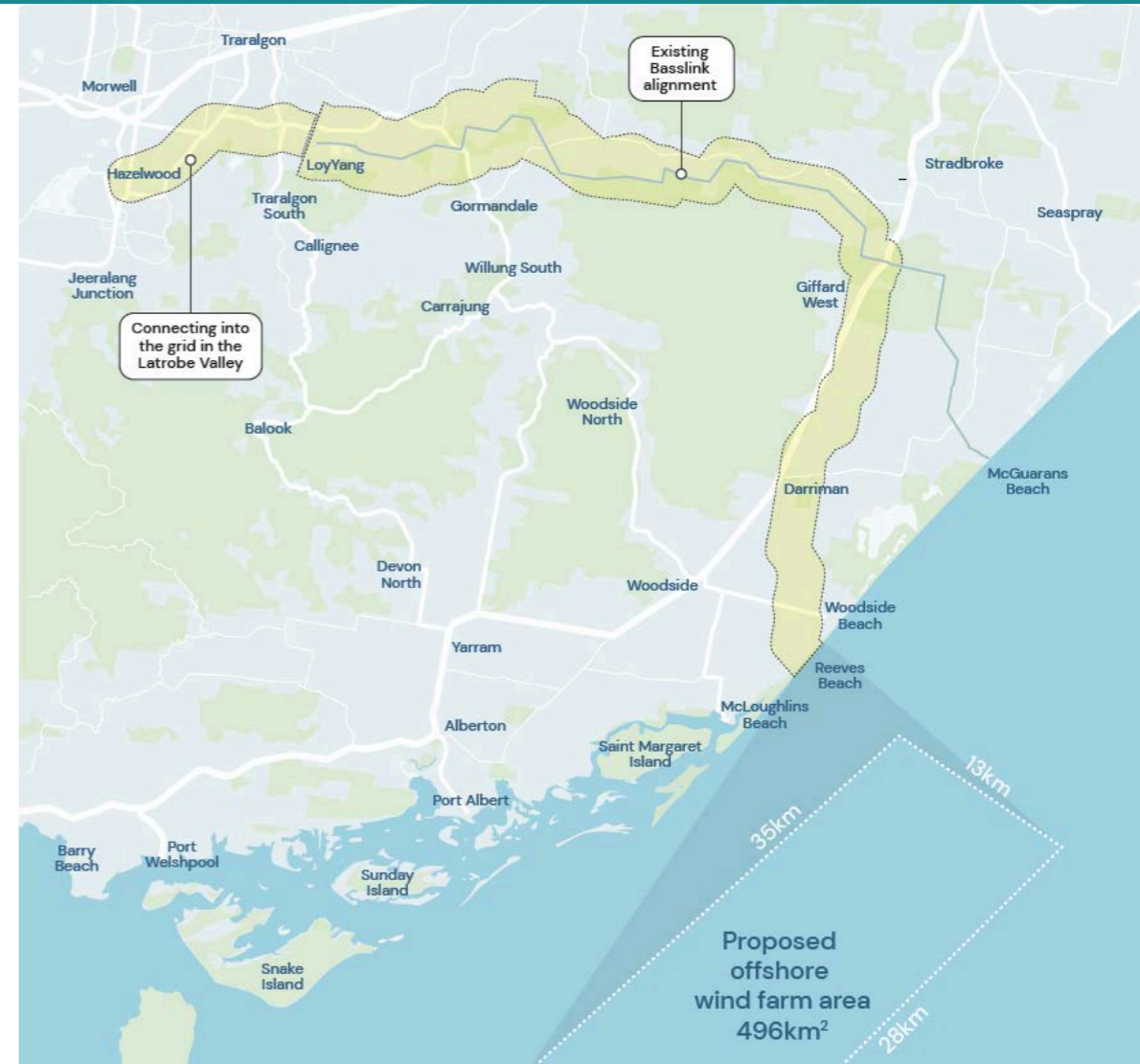
Transmission route selected

We found that Corridor B (Eastern) offers the best outcome overall

This route comes to shore around Reeves Beach and travels underground through Darriman, Giffard West, Hiamdale to the Latrobe Valley

Key facts and figures:

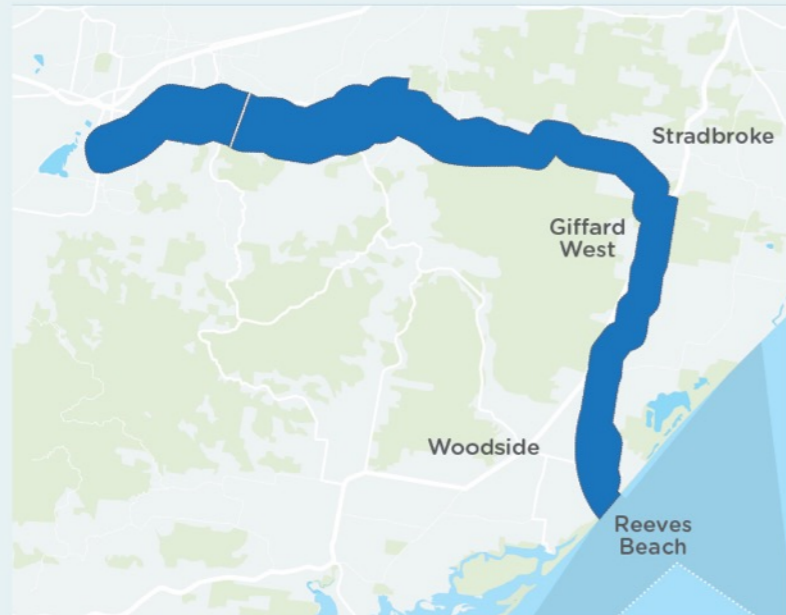
- Underground unless it is not technically feasible or where overhead lines would have lower impacts
- High Voltage Alternating Current (HVAC)
- 30-40 m wide easement
- 75 km onshore cables and 2-4 substations above ground, up to 35 km may follow Basslink
- 20-40 km offshore cable route and up to 4 substations above sea level



On balance, we found this route performs best against a range of important criteria

What we found

Corridor B (Eastern)



Reeves Beach, Darriman, Giffard West, Hiamdale, Latrobe Valley

- ✓ Strong community support for following Basslink as much as possible
- ✓ Avoids highly vegetated areas for reduced impact on trees, biodiversity and habitat
- ✓ Fewer constraints provides flexibility for system design and construction
- ✓ Fewer community concerns raised
- ✓ Shorter offshore cable route has less potential for marine and coastal impacts
- ✓ Best safety outcomes expected

- ✗ Longer onshore route means some minor losses of electricity during transmission
- ✗ Some landholder concerns raised
- ✗ More costly than Corridor A

On balance, this option has the best overall outcome and will be progressed through planning and design

This option performed consistently well across all assessment criteria

What we found

Corridor A (Western)



*Reeves Beach, Woodside,
Old Rosedale Road, Hiamdale,
Latrobe Valley*

- ✓ Shortest, most direct route for efficient transmission of electricity
- ✓ Lowest cost
- ✓ Shorter offshore cable route has less potential for marine and coastal impacts

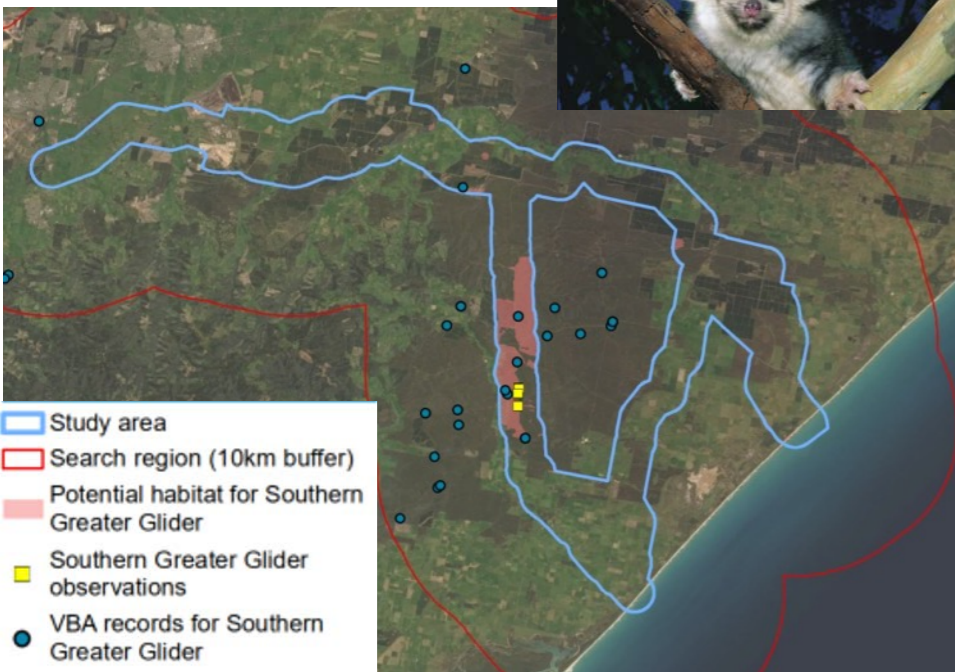
- ✗ Significant vegetation impacts, greatest potential to impact on biodiversity and habitat
- ✗ More community concerns raised, mostly about environmental issues
- ✗ Some construction challenges due to confined and remote area
- ✗ Some landholder concerns raised

The main disadvantage with this option is onshore environmental impacts

What we found

Corridor A (Western) would have resulted in greatest extent of vegetation and habitat loss

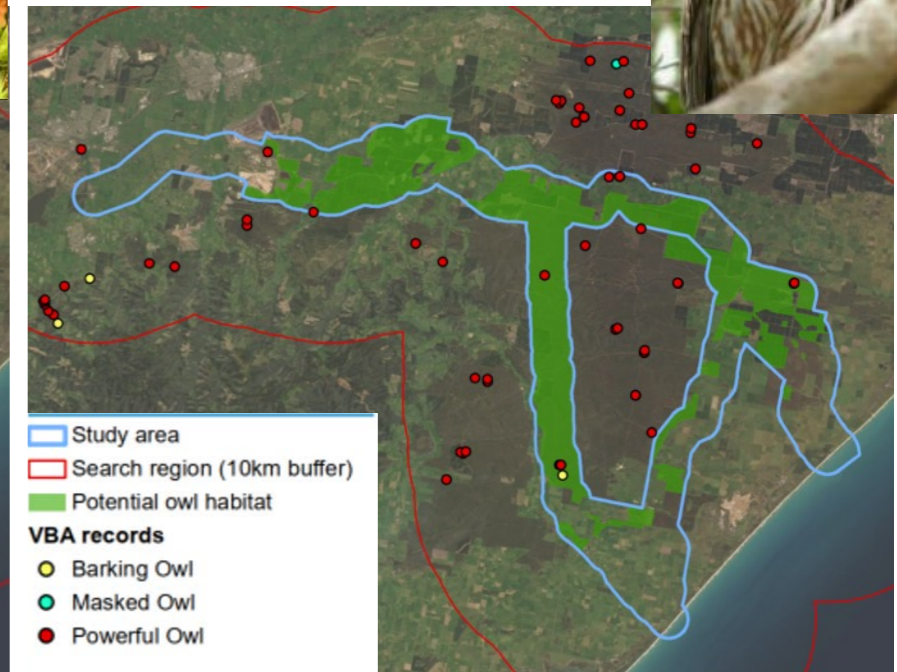
There are also areas of suitable habitat for important species within the route selected that will be considered as the route is refined further



Southern Greater Glider habitat



Southern Toadlet habitat



Various owl species

Corridor A (Western) would have the greatest extent of vegetation and habitat loss

What we found

Corridor C (Northern)



McGaurans Beach, Giffard, Hiamdale, Latrobe Valley

- ✓ Strong community support for following Basslink as much as possible
- ✓ Generally avoids highly vegetated areas for reduced impact to trees, biodiversity and habitat

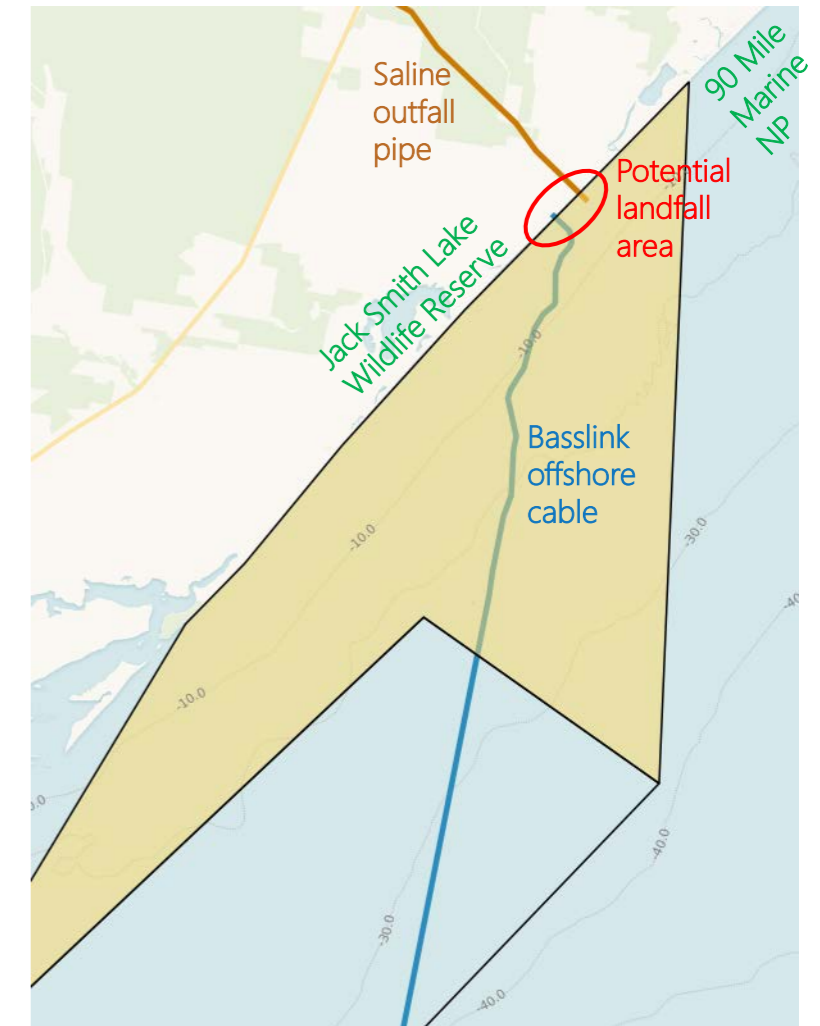
- ✗ Highest technical difficulty due to complex construction conditions at shore crossing
- ✗ Longer offshore route has greater potential for marine impacts
- ✗ Longer offshore route means some minor losses of electricity during transmission
- ✗ Highest cost
- ✗ Some landholder concerns raised
- ✗ More known sites of Aboriginal cultural heritage significance which could be affected

The main disadvantage with this option is constructability issues around the shore crossing

What we found

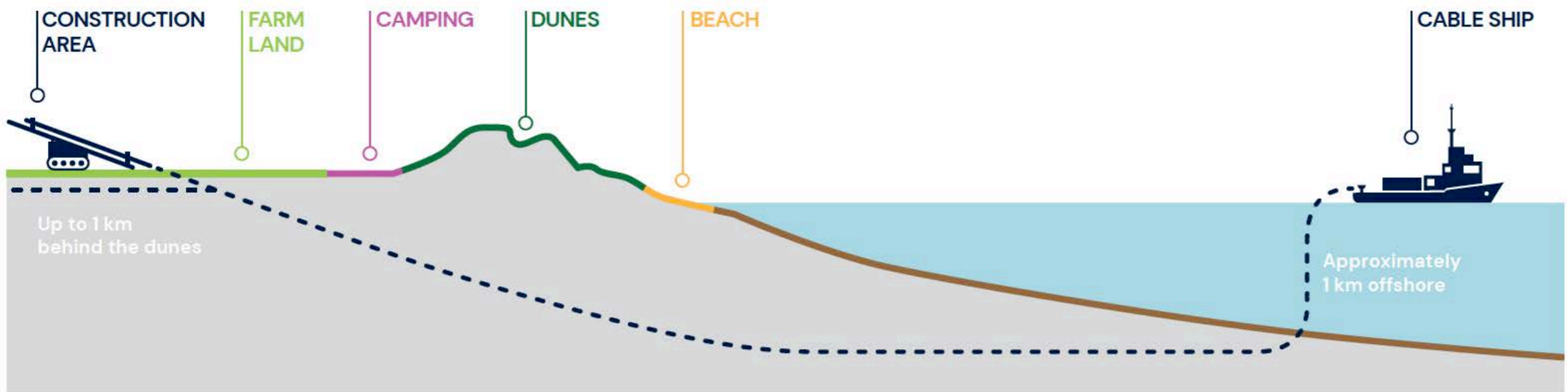
Corridor C (Northern) has several technical challenges, making it very difficult (if not impossible) to construct and operate

- The landfall area is highly constrained with:
 - Existing infrastructure - Basslink and Saline Outfall Pipe
 - Environmentally sensitive areas, especially around Jack Smith Lake Reserve and the 90 Mile Marine National Park
 - Areas of significant Aboriginal Cultural Heritage sensitivity
- Requires additional crossings of Basslink:
 - Adds risk to both Star of the South and Basslink operations
 - Adds complexity and risk to construction



The Corridor C (Northern) landfall is highly constrained by existing infrastructure, ecology and heritage sites

Shore crossing at Reeves Beach

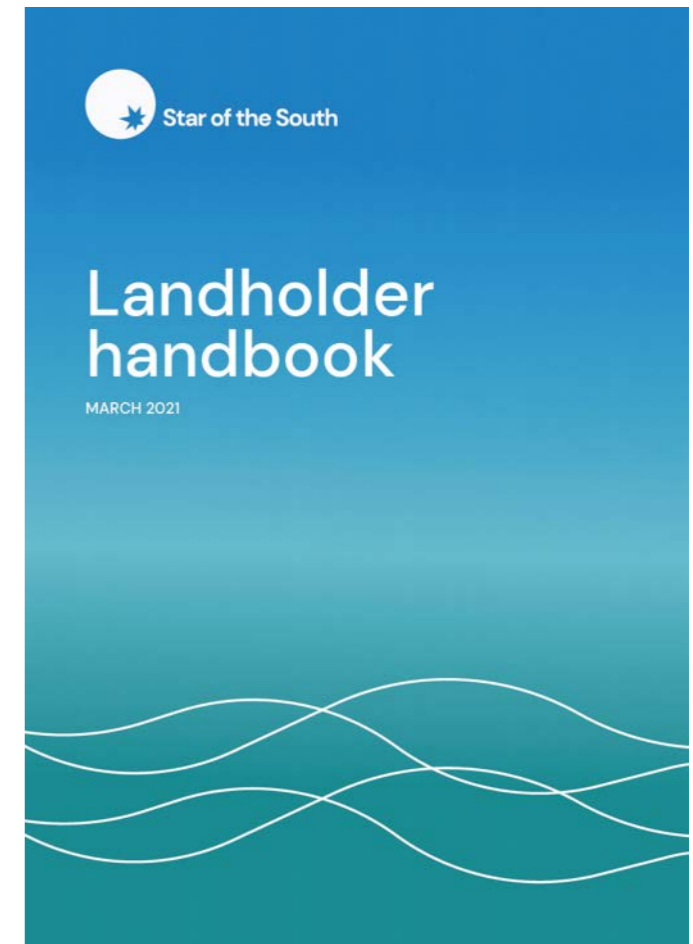


Artists impression, not to scale

No trenching will be undertaken on the beach or dunes

Working with landholders

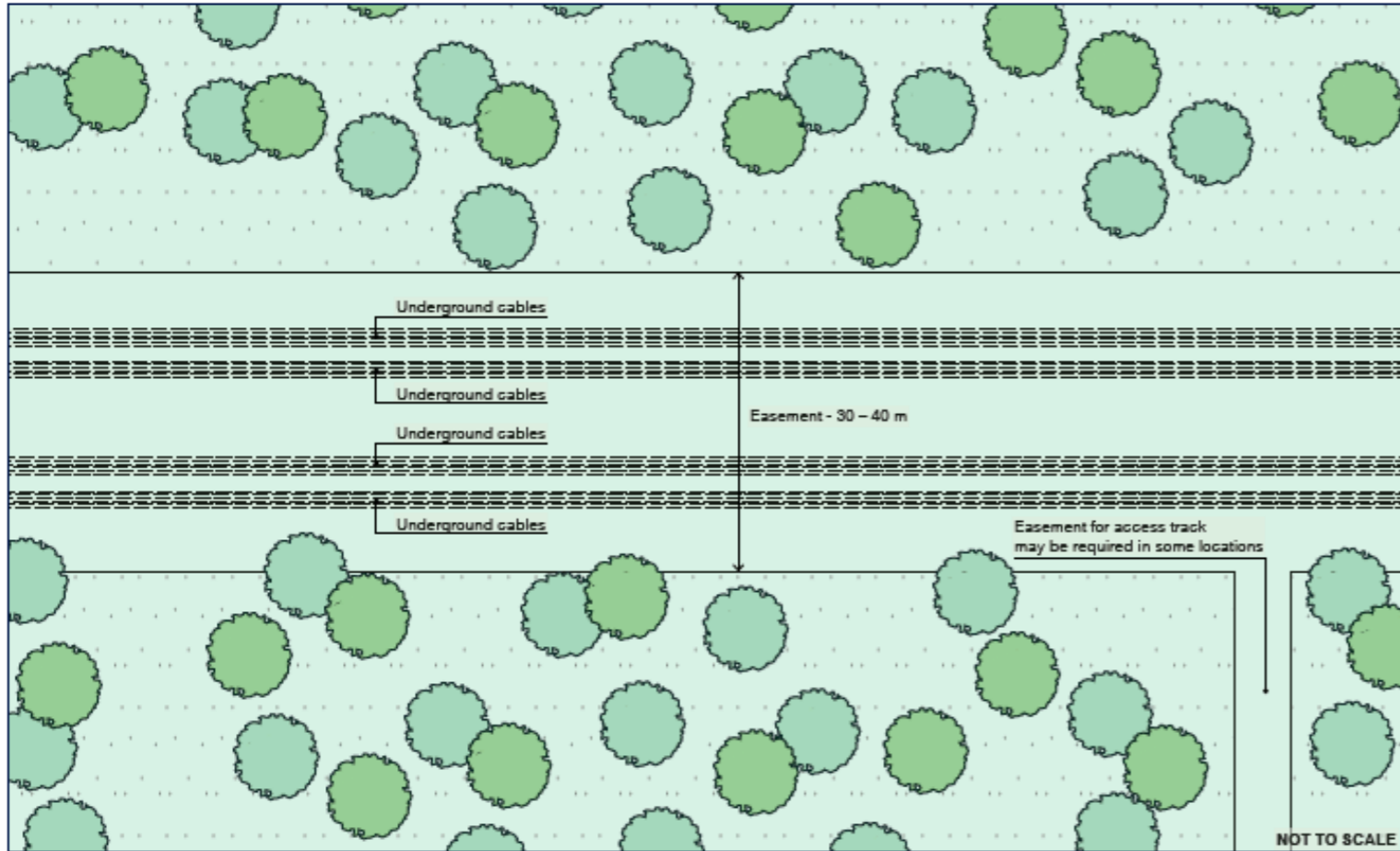
- An important next step is working with landholders whose property may be suitable to host the transmission infrastructure to:
 - Fine-tune the alignment
 - Discuss compensation
 - Plan ways to minimise impacts to their land.
- We've supplied a handbook which outlines key information about:
 - Key steps
 - Easements, including diagrams showing what you would see
 - Agreement and compensation
 - Construction
 - Operations and maintenance



We'll work with landholders to refine an alignment, plan for construction and minimise disruption

Proposed easement

Example easement between joint bays



PLAN VIEW

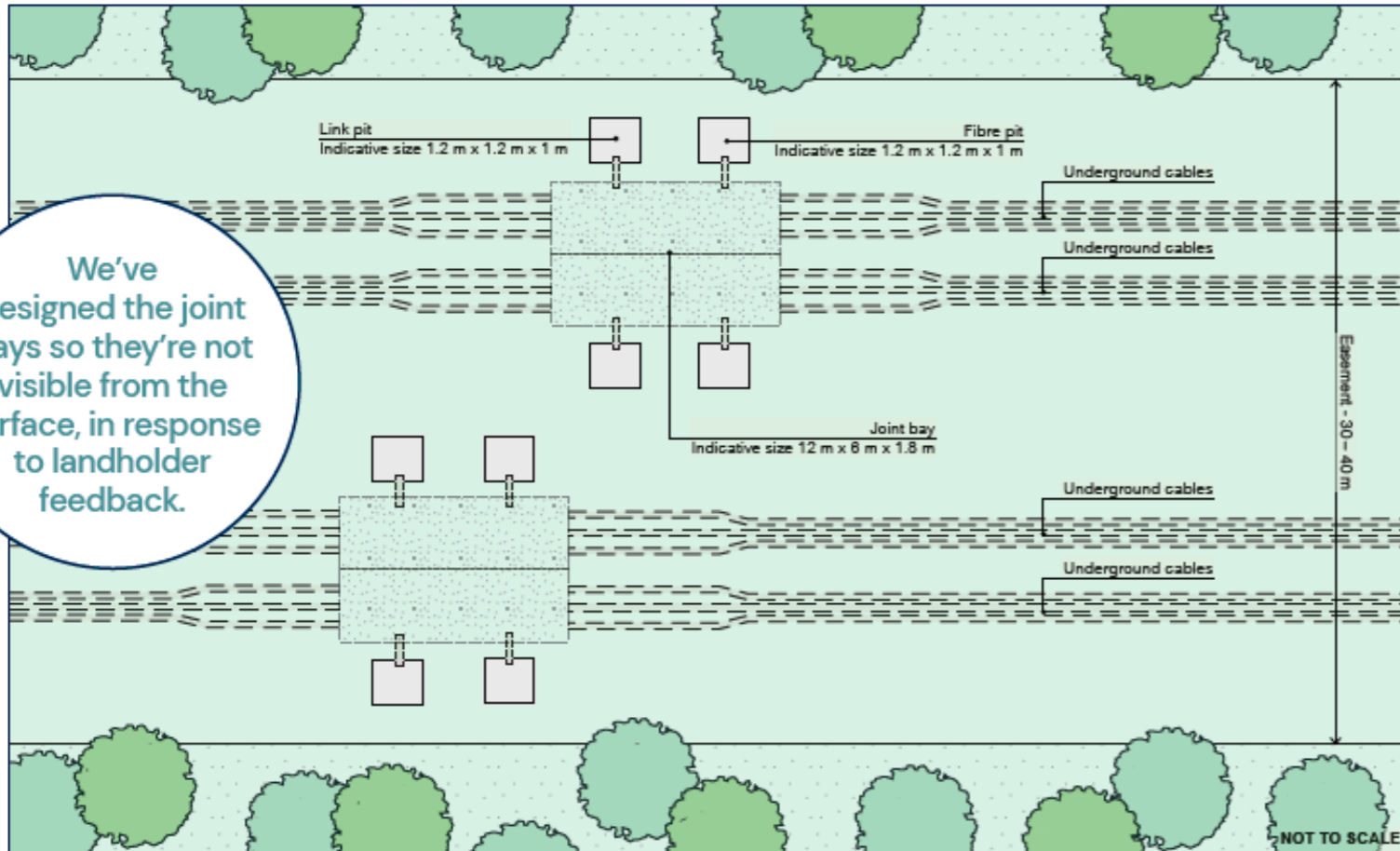


Example of easement during operation - Basslink

Our easement is expected to be 30-40 m wide

Proposed easement

Example easement at joint bays



We've designed the joint bays so they're not visible from the surface, in response to landholder feedback.

PLAN VIEW



Conduits in trench (cables go inside)



Joint bay construction

Joint bays would be installed every 600-1200 m – only link and fibre pits would be seen from the surface

Reminder– upcoming events

Webinar – presentation and Q&A, Monday 22 March, 5.30-6.30pm

Woodside Beach Surf Lifesaving Club – coffee morning, Saturday 27 March, 9am-11am

Yarram Memorial Park – sausage sizzle, Saturday 27 March, 1pm-3pm – arrive at 12.30pm to celebrate our office opening with a Welcome to Country and Smoking Ceremony.

Morwell Sunday Market – market stall, Sunday 28 March, 8am-1:30pm

Lakes Entrance, Central Hotel (pub) – Thursday 22 April, 5:30pm-7:30pm

Face painting for the kids at Woodside and Yarram!



Everyone's invited to come along and learn more about what the project means for Gippsland

Thank you