ON LAND CONSTRUCTION

December 2021







Studies are underway to identify the best construction method for Marinus Link

Marinus Link is a proposed 1500 megawatt (MW) electricity interconnector comprising two 750 MW cables and fibre-optic cables to be located between Tasmania and Victoria. The interconnector includes a 250-kilometre High Voltage Direct Current (HVDC) subsea cable across Bass Strait and a 90-kilomentre HVDC underground cable in Victoria. This brochure refers to the construction method for the on land component.

INSTALLING THE LAND CABLES

The land cables for Marinus Link will be installed using open trenching wherever possible. In case of crossings of e.g. rivers, railway, services, etc., horizontal directional drilling (HDD) will be used.

The standard construction corridor for trenching will be up to 36 meters wide to allow for trenches, drainage, machinery (like excavators) and stockpiles of soil. The construction corridor width will be adjusted where necessary to avoid impacting vegetation and existing infrastructure like dams and sheds.

Horizontal directional drilling (HDD)

HDD is a construction method which uses a horizontal drill to create a bore hole for the cable under the ground, instead of a trench. The cable is then pulled through the bore hole by machinery.

HDD will be used to install cables under important roads and waterways, as well as where sensitive areas need to be avoided.

HDD is labour-intensive, and the ability to use HDD, as well as the length of time needed for drilling, depends on geology and other land conditions. In some conditions, it may take months to complete.

Ceotechnical and environmental investigations will help determine where HDD will be used.



INDICATIVE CONSTRUCTION

LAYINC OF THE CABLES

The land cables will be installed in lengths ranging from 800 to 1,300 metres.

The cable lengths will be connected at joint bays, which are concrete pits that are approximately I2 metres long, 2.5 metres wide and 2.5 metres deep, buried at least 0.5 metre below the ground. Where possible, joint bays will be located next to boundary fences or other features agreed by landowners to reduce impacts on land use.

The construction corridor and other access areas will be reinstated and rehabilitated following construction.

The Victorian shore crossing is proposed to be constructed using HDD.

A temporary HDD drill pad of crushed rock will be laid on cleared farmland behind the sand dunes. From the pad, a drill will bore into the ground at an angle, working toward the water. The bore hole will extend into Bass Strait, either one kilometre from the transition point, or to a water depth of around IO metres, whichever is determined to be safer.

This method means the shore crossing can be constructed with minimal disruption to the dunes, th beach and beach goers. It will also assist in reducing impacts on any environmental and cultural heritage values identified in the vicinity.

Disruption to the beach

Beaches at Waratah Bay will remain open during the shore crossing construction. Very short temporary closures may be needed to manage public safety during some work activities.



INDICATIVE CONSTRUCTION

CONSTRUCTION IMPACTS

Most impacts to native plants, animals and cultural heritage values will be minimised either through minor changes to the route or by using HDD to install the cable in specific locations.

Plants

Some vegetation is to be removed for the construction of the transition station, converter station and areas of open trenching.

On-site environmental surveys will help determine which vegetation needs to be removed and where adjustments to the route can be made to minimise the impacts.

Animals

Our desktop studies have identified that there might be several significant animal species that are likely to be found within the project area.

Further in field surveys will help determine which of these species are found within our project area and what adjustments can be made to minimise impacts.

Cultural heritage

A desktop assessment of Aboriginal and historic cultural heritage was completed in 2021. The project is working with traditional owners in the area to ensure any Aboriginal cultural heritage sites and areas of significance are managed in accordance with their requirements.

No places of historic cultural heritage significance have been located within the survey area, however further on-site studies will be undertaken to confirm this.

Visual impacts

Using underground cables means potential visual impacts are limited to the construction phase and the permanent structures which need to be built.

To minimise visual impacts from the converter and transition stations, they will be designed to blend into the local environment through building placement, colour



FURTHER STUDIES

During the feasibility assessment, desktop studies, ground truthing and a number of reconnaissance surveys were undertaken.

Further studies will be completed as part of a detailed assessment of Marinus Link to understand likely impacts on land and shore crossing during construction. Their range and scope will be confirmed as the regulators determine the assessment and approval requirements for the project. Further detailed studies for the land component of the Project will likely Marinus Link include:

- **♦** Agriculture
- ♦ Air quality
- Olimate change
- Contaminated land and acid sulfate soils
- Oultural heritage
- ♦ Economics
- Ceomorphology and geology
- Oceotechnical
- Oreenhouse gas emissions
- ◊ Groundwater

- O Hydrology
- Landscape and visual impact assessment
- Land use and planning
- Noise and vibration
- Social impact assessment
- Sustainability
- O Terrestrial ecology
- Output Traffic and transport
- Vaste management



MORE INFORMATION

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For further information on the project:

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