

# Staverton to Hampshire Hills Route selection and environmental values and impacts

North West Transmission Developments - August 2020



# Staverton to Hampshire Hills – **Route selection and environmental values and impacts**

**TasNetworks is currently investigating a new electricity transmission corridor between the Staverton and Hampshire areas in North West Tasmania. This forms part of the early works required to progress the proposed North West Transmission Developments, needed to support Marinus Link and the implementation of TasNetworks' North West Tasmania Strategic Transmission Plan.**

The proposed Staverton to Hampshire Hills transmission line will increase the capacity of North West Tasmania's transmission network, supporting new renewable energy projects planned for the region.

In late 2019 and early 2020, TasNetworks consulted on a proposed route between Staverton and Hampshire Hills. After considering landowner, neighbour and community feedback, we have released a revised route for the Staverton to Hampshire Hills section of the North West Tasmania Transmission Developments – the preferred route.

The preferred route seeks to balance a range of objectives, including considering outcomes for landowners, local communities and businesses and the environment. Further engagement, in addition to field work and reconnaissance surveys, will soon commence as we finalise the route design.

## Route **Selection Process**

TasNetworks' 18-month route selection process for the preferred Staverton to Hampshire Hills route has considered a range of factors and constraints in the development of transmission infrastructure. Evaluation of the route options to identify prudent and feasible routes included:

- **cost,**
- **constructability,**
- **transmission system integrity and performance, and**
- **environmental and social aspects including occupation, land use, native vegetation, threatened ecological communities and species, planning controls and geomorphology.**

Landscape and visual amenity were also key considerations in route selection.

Our design seeks to minimise adverse impacts on landowners, businesses and conservation areas. We also take into account tourism, visual amenity, high value agriculture and broader community values.

# What is the preferred Staverton to Hampshire Hills route?

**TasNetworks has identified a preferred route to connect a new switching station at Staverton to a new switching station at Hampshire. A switching station is equipment used to tie together two or more electric circuits through switches.**

Initially several corridors were considered to connect the Staverton to Hampshire Hills transmission line – one north, through Gunns Plains, another through the River Leven valley and a third, south through the Vale of Belvoir. The upper River Leven valley between Loongana Range and the rugged Black Bluff Range and Fossey Mountains was identified as the proposed corridor.

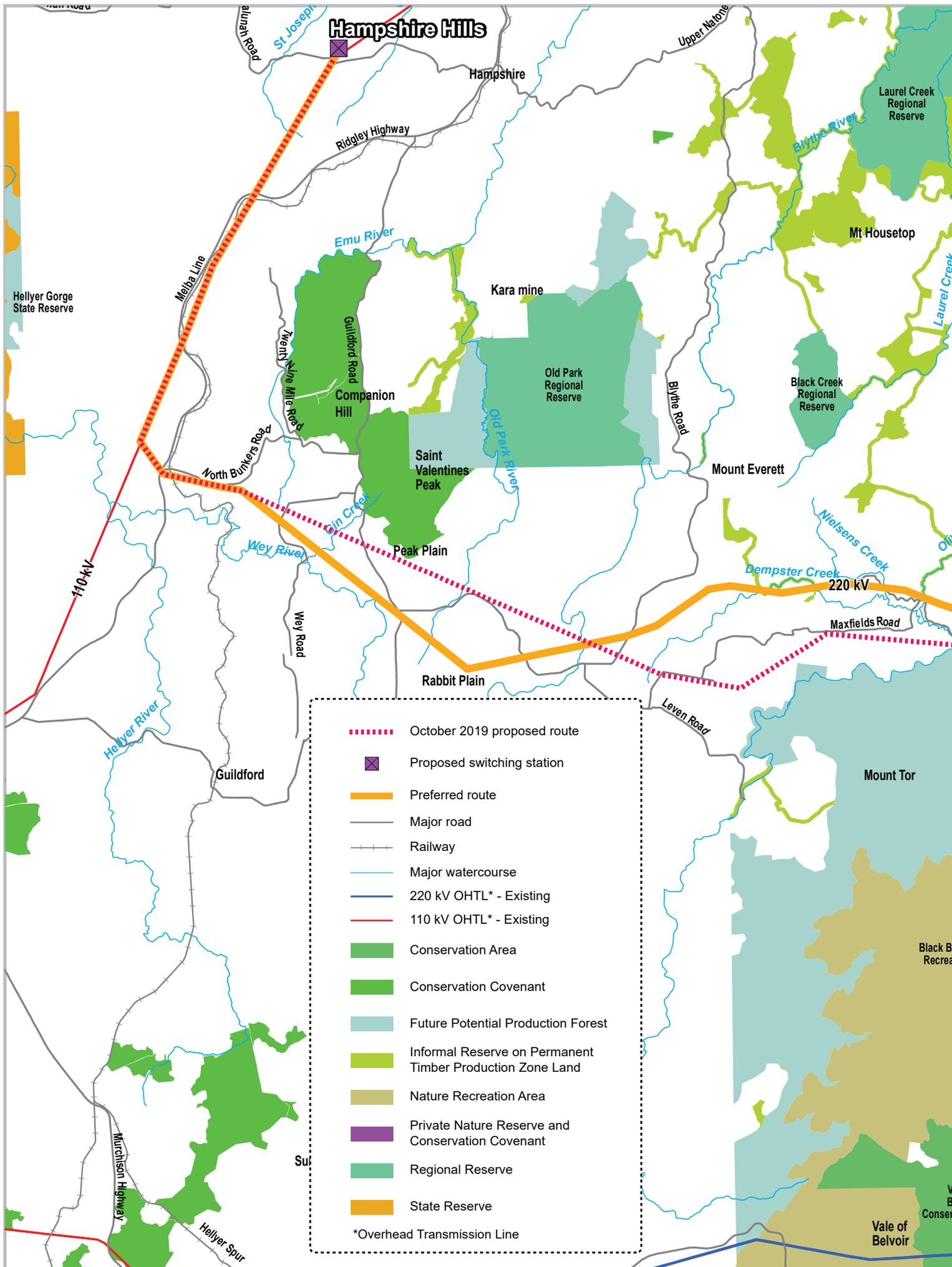
Routes north and south of St Valentines Peak were investigated. A route running south of St Valentines Peak was favoured over a route running north of St Valentines Peak as it avoids Old Park Regional Reserve and difficult granite terrain near Mt Housetop. The preferred route crosses extensive plantations reducing impacts on native vegetation and conservation values. For the section of Loongana Road at the main access road to Leven Canyon visitor areas and viewpoints and through Griffiths Flats the preferred route has avoided amenity impacts.

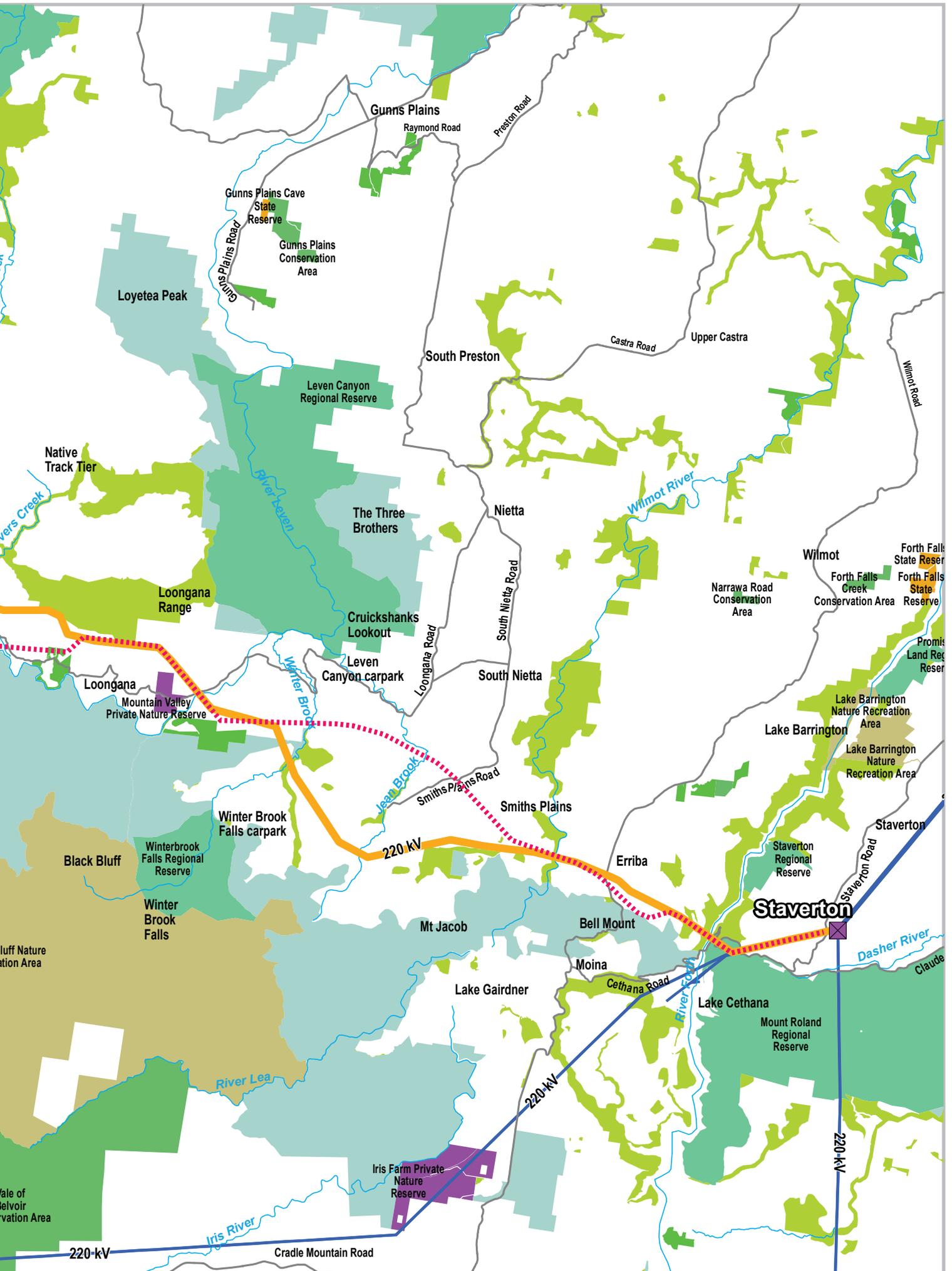
Looking from Cruickshanks Lookout (situated at Leven Canyon visitor area), the proposed overhead transmission line will be visible partly and remotely where it crosses the River Leven. It will not be visible from the lower viewing platform. The preferred route runs mostly through plantations. It also crosses a small number of private landholdings.

Visual impact of transmission lines is recognised by TasNetworks as being a key consideration. TasNetworks will work carefully with landowners and the community to reduce potential visual impacts where practicable through detailed design of the proposed transmission lines, and in considering construction methods.



A map of the preferred transmission route, compared with the 2019 proposed transmission route from Staverton to Hampshire Hills August 2020



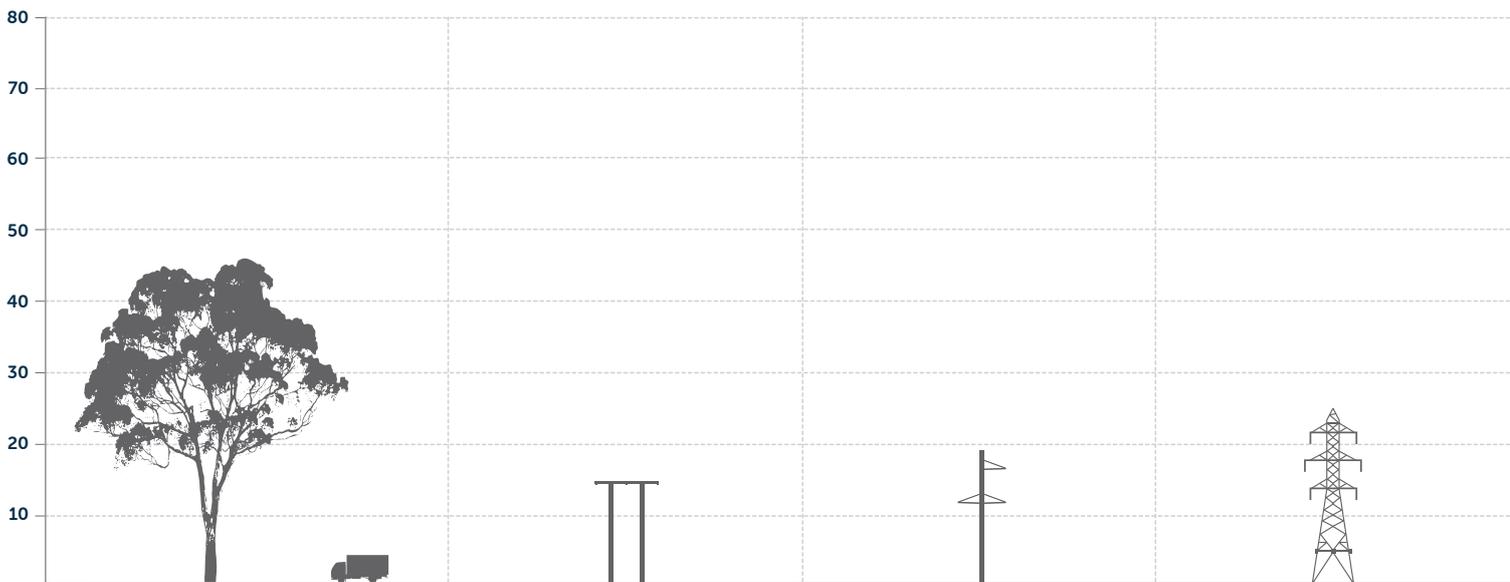


# What size are the towers?

The proposed electricity transmission corridor will include a new single transmission line in a new easement. An easement up to 90 metres wide would be needed to accommodate the transmission line, with transmission towers on average being 42 metres tall with a small number up to 55 metres tall.

Illustration of the proposed transmission line towers and easement from Staverton to Hampshire Hills are shown below:

metres height



Relative Size

Large Gum Tree

Small Truck

110 kV Overhead Line - Existing

110 kV Overhead Line - Existing

110 kV Double Circuit - Existing

50 Metres Easement Width

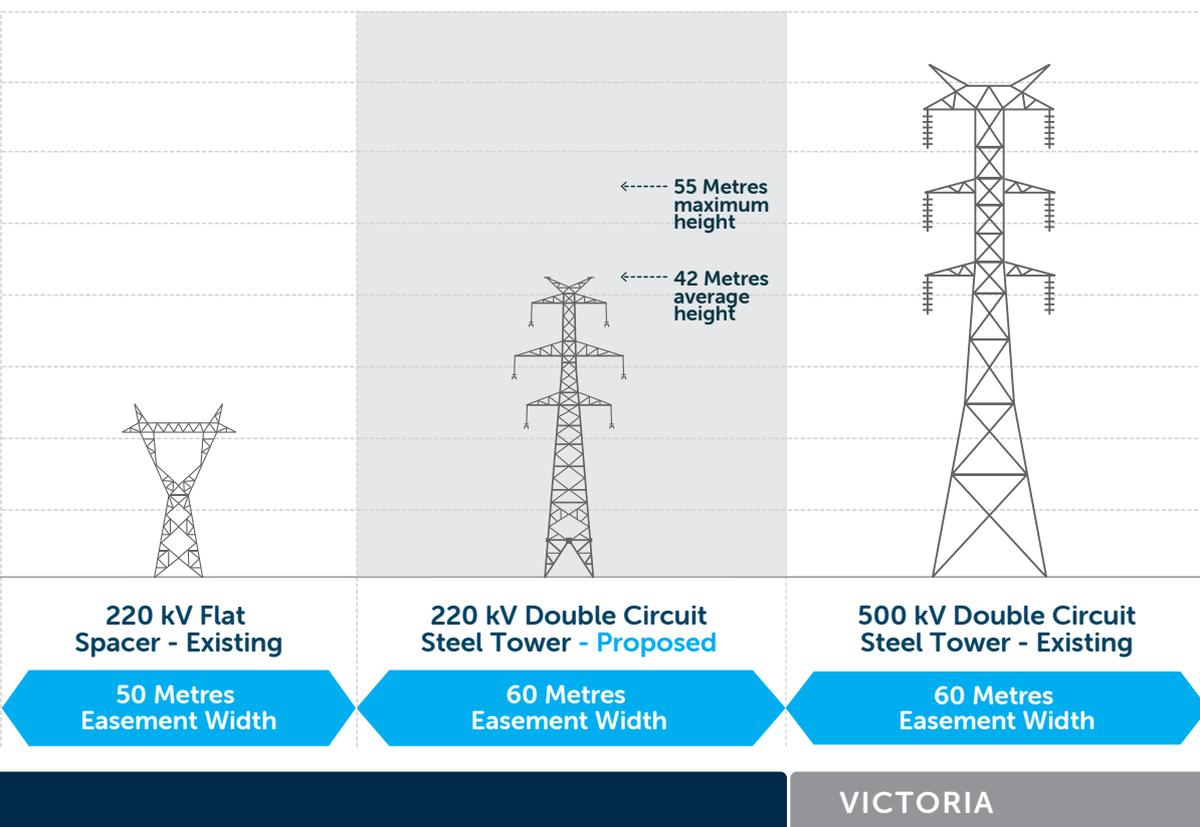
50 Metres Easement Width

50 Metres Easement Width

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## What is an easement?

An easement is a legal right that provides one party with rights over another party's land. Easements will allow TasNetworks to construct, operate and maintain the transmission lines. Easements support public safety by restricting certain uses and activities that could cause people, vegetation or machinery to come into contact with live electricity conductors.



# How was the preferred route selected?

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## Careful route selection is the most effective way to reduce the impacts of the project.

TasNetworks has identified a route that considers impacts to landowners, local communities, the environment and areas that have cultural significance.

The route selection process starts by comparing possible options that are investigated and analysed against important criteria. These criteria consider a range of factors including:

- Proximity to houses, businesses and townships
- Potential impacts on tourism and other business operations like forestry
- Visual impacts
- Cost for construction and maintenance
- Ease of access
- Steep terrain and slope stability
- Energy system and technical requirements
- Land uses
- Planning and environmental policy
- Significant agricultural land
- Native vegetation
- Threatened plants and animals
- Cultural heritage sites
- Contaminated land
- Areas of local and state significance

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Investigation into these criteria was undertaken by a team of experts in the fields of land use planning, power system engineering, economics, environment and cultural heritage.

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In late 2019 and early 2020, TasNetworks consulted on a proposed route that was identified using this information. Following this initial engagement process, TasNetworks received requests for changes to the proposed route from directly affected landowners, neighbours and community groups. We then met with these interested parties to better understand their concerns and suggestions for realignment.

TasNetworks undertook further detailed investigations into variations to the proposed route, which aimed to address landowner and community concerns and suggestions, together with other criteria. As part of the investigation process, TasNetworks undertook eagle nest surveys in late April and early May 2020.

The wide range of feedback received from our initial engagement process on the Staverton to Hampshire Hills transmission route has now been considered. As a result, changes have been made to the proposed route that seek to address a number of key issues and concerns raised by landowners and the community. This has resulted in what we refer to as the preferred route.



## What has been protected?

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Where practical, TasNetworks has sought to reduce impacts on landowners, local communities and the environment. In designing the preferred route for the Staverton to Hampshire Hills transmission line, TasNetworks has avoided the following specific local areas:

- **Leven Canyon Regional Reserve**
- **Gunns Plains Conservation Covenant**
- **St Valentines Peak**
- **Old Park Regional Reserve**
- **Black Bluff Nature Recreation Area**
- **Conservation covenants on private properties in Loogana and Taylors Flats**
- **Mountain Valley Private Nature Reserve and conservation covenant**
- **Iris Farm Private Nature Reserve and conservation covenant**
- **Vale of Belvoir Conservation Area**
- **Vale of Belvoir Reserve conservation covenant**
- **Black Bluff Nature Recreation Area**
- **Romney Marsh conservation covenant**
- **Hatfield Plain conservation covenant**

## What are the potential impacts of the preferred route?

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TasNetworks has completed a range of desktop technical studies to understand the potential impacts of the proposed route. These studies included terrestrial ecology, cultural heritage and geomorphology. The findings now need to be tested by further field surveys.

**Findings from the desktop technical studies and field surveys will help TasNetworks to identify and mitigate impacts where possible and to manage those that cannot be avoided. Some possible impacts identified through early investigations are outlined below along with strategies to avoid and manage them through careful planning, design and construction approaches.**

What could be impacted?	How will impacts be avoided or managed?
<p><b>Threatened birds of prey nests</b></p>	<p>Known raptor nests have been identified in the region of the preferred route . Raptors, along with other threatened birds, could be displaced if their nests or nesting areas are disturbed by construction works.</p> <p>To avoid impacts, TasNetworks will ensure that construction works in proximity to active nests occur outside of breeding season.</p> <p>TasNetworks will also ensure that vegetation around important nesting sites is protected and vegetation clearing along wildlife corridors is minimised.</p>
<p><b>Limestone formations and underground caves</b></p>	<p>The preferred route passes near areas that feature limestone formations and underground caves that may contain unique plants and animals and be important to Aboriginal people.</p> <p>Surveys will be completed to confirm the location of these formations, and towers will be sited to avoid these areas.</p>
<p><b>Threatened animal and plant species and their habitat, including:</b></p> <ul style="list-style-type: none"> <li>• Spotted-tailed quolls</li> <li>• Tasmanian devils</li> <li>• Tasmanian wedge-tailed eagles</li> </ul>	<p>The preferred route has been designed to avoid impacts to threatened species and ecosystems where possible.</p> <p>Detailed surveys will be completed to confirm the location of threatened species, and towers will be sited, where practicable, to avoid these areas.</p> <p>TasNetworks will also ensure that works occurring near threatened animals and their habitat will be scheduled at times to avoid migration, nesting and breeding periods.</p> <p>Threatened species could also be impacted by the spread of animal and plant diseases and invasive weeds caused by construction works. To avoid this occurring, TasNetworks will ensure that appropriate measures are in place, such as regularly washing construction vehicles and applying disinfectants.</p>
<p><b>Aboriginal artefacts and rock-shelter sites</b></p>	<p>The preferred route avoids known Aboriginal artefacts and rock-shelter sites. Further surveys will be completed to identify important Aboriginal places, artefacts and story lines.</p> <p>TasNetworks will develop an Aboriginal Heritage Assessment Report in consultation with local Aboriginal communities and their representative organisations, to ensure important Aboriginal sites, story lines and artefacts are identified and appropriately managed.</p>
<p><b>Visual impacts, particularly from and near</b></p> <ul style="list-style-type: none"> <li>• St Valentines Peak</li> <li>• Mt Housetop</li> <li>• Black Bluff</li> <li>• Leven Canyon</li> <li>• views from lookouts, roads and properties</li> </ul>	<p>Some landscapes will be changed due to the presence of overhead transmission lines and towers.</p> <p>TasNetworks has considered landscape and visual impacts carefully. Impacts on significant views and from lookouts have been avoided where possible. The transmission line route was selected and towers sited to reduce impacts on landscapes and views. Tower heights will be varied where possible to further reduce impacts.</p> <p><b>Further work is proposed to consider and address visual amenity.</b></p>
<p><b>Significant river valleys, including steep and unstable areas, including:</b></p> <ul style="list-style-type: none"> <li>• River Forth</li> <li>• Wilmot River</li> <li>• River Leven</li> <li>• Winter Brook</li> </ul>	<p>Construction in or near steep and unstable slopes within river valleys can cause soil erosion and expose the transmission line to landslide or slumping risks.</p> <p>TasNetworks has selected routes and sited towers to avoid historic landslides and landslip prone areas where possible. Unstable slopes will be protected by minimising vegetation clearing in these areas and erosion will be managed by maintaining vegetation near watercourses.</p>

# How will the community be engaged?

**Due to COVID-19, engagement is currently and largely being conducted by phone, email, and other non-face-to-face methods. Some face to face engagements have occurred with directly affected landowners. We will continue to review these methods in accordance with health and safety advice. Our preference is, and will be, to engage face-to-face where health and safety allows.**

TasNetworks will be meeting with many stakeholder groups including landowners, local councils, government and the broader community to discuss the preferred route, the route selection process, and the next stages of the investigation process. These engagements are currently planned to include skype briefings and meetings, live online discussion forums, webinars, virtual drop-in sessions, and pre-arranged face-to-face drop-in sessions at the Future Energy Hub in Burnie. Notification of when these engagements will be occurring will be advertised in local papers and radio stations, on our website and Facebook pages, and via email.

We remain committed to working closely with the community, businesses and landowners as planning for Marinus Link and the proposed North West Tasmania transmission developments continues.

As part of the landscape and visual impact assessment process, TasNetworks will be seeking further community feedback to better understand the important views and amenity values that may be impacted by the project and explore visual impact mitigation opportunities.

Landowners, neighbours and community members will also have several opportunities to comment during the environmental, land use planning

and cultural heritage approvals process. These will include formal opportunities required by the approvals processes and informal opportunities through planned engagement activities. As part of this, there will be opportunity to make written submissions. TasNetworks will provide more information about these opportunities once the environmental and planning approvals process is confirmed.

**You can contact us with any questions about the proposed developments to the North West Tasmanian transmission network via our project email and phone line, by visiting [tasnetworks.com.au](https://tasnetworks.com.au) or emailing us on [projectmarinus@tasnetworks.com.au](mailto:projectmarinus@tasnetworks.com.au), or call us on 1300 127 777.**

Visit [talkwith.tasnetworks.com.au](https://talkwith.tasnetworks.com.au) to view a more detailed map, share your ideas and find out about upcoming community engagement events.

You can also access our information from the **Future Energy Hub:**

- [www.facebook.com/FutureEnergyHub](https://www.facebook.com/FutureEnergyHub)
- [futureenergyhub@cradlecoast.com](mailto:futureenergyhub@cradlecoast.com)
- (03) 6433 8424
- 1-3 Spring Street, Burnie Tas 7320



photo: Greg Gibson

