

Gracemere Substation Project Update



June 2022

We're connecting the new Gracemere Substation to the local electricity network!

Final touches for Gracemere Substation

Gracemere's new substation is almost complete!

Recent work at the substation has included establishing security fencing to keep the community safe and the electrical equipment inside the substation secure, as well as laying turf around the substation to minimise erosion and to improve the visual amenity of the facility – see Figure 1.



Fig 1 – New turf around the Gracemere substation.

Connecting Gracemere substation to the local electricity network

With most of the work inside the substation now complete, we are focussed on connecting the Gracemere substation to Egans Hill substation. This will involve building a new 66,000 volt or 66kV powerline between the two substations. The powerline will consist of a combination of overhead and underground construction.

In town, we will construct an underground cable from the Gracemere substation, up John Street to Lawrie Street. At Lawrie Street the cable will head south-east downhill to the roundabout at Whitman and Bland Streets.

Building this section of the powerline underground accommodates the roadworks underway for the expansion of Lawrie Street, as well as utilising the limited space available to run a powerline through town.

Work to install the conduit to house the new underground cable is scheduled to be completed by the end of June. The next step will be to install the cable from the substation to its connection point with the overhead network at a pole near the roundabout at Whitman and Bland Streets. This work is scheduled to commence in August 2022.

At the roundabout at Bland Street, the powerline will change from underground to an overhead powerline through to Egans Hill.

Where will the new overhead powerline go and what will it look like?

The new powerline between Gracemere and Egans Hill will be one of the main arterial powerlines in the local electricity network. The overhead section of the powerline will be constructed using concrete poles for strength and durability.

The overhead powerline will connect to the underground cable at a pole located at the end of Whitman Street, near the roundabout at Bland Street. The overhead line will run parallel to Gavial Gracemere Road, turn up and follow Sullivan Road, where it will connect to an existing line beside the Burnett Highway to Egans Hill substation – see Figure 2.

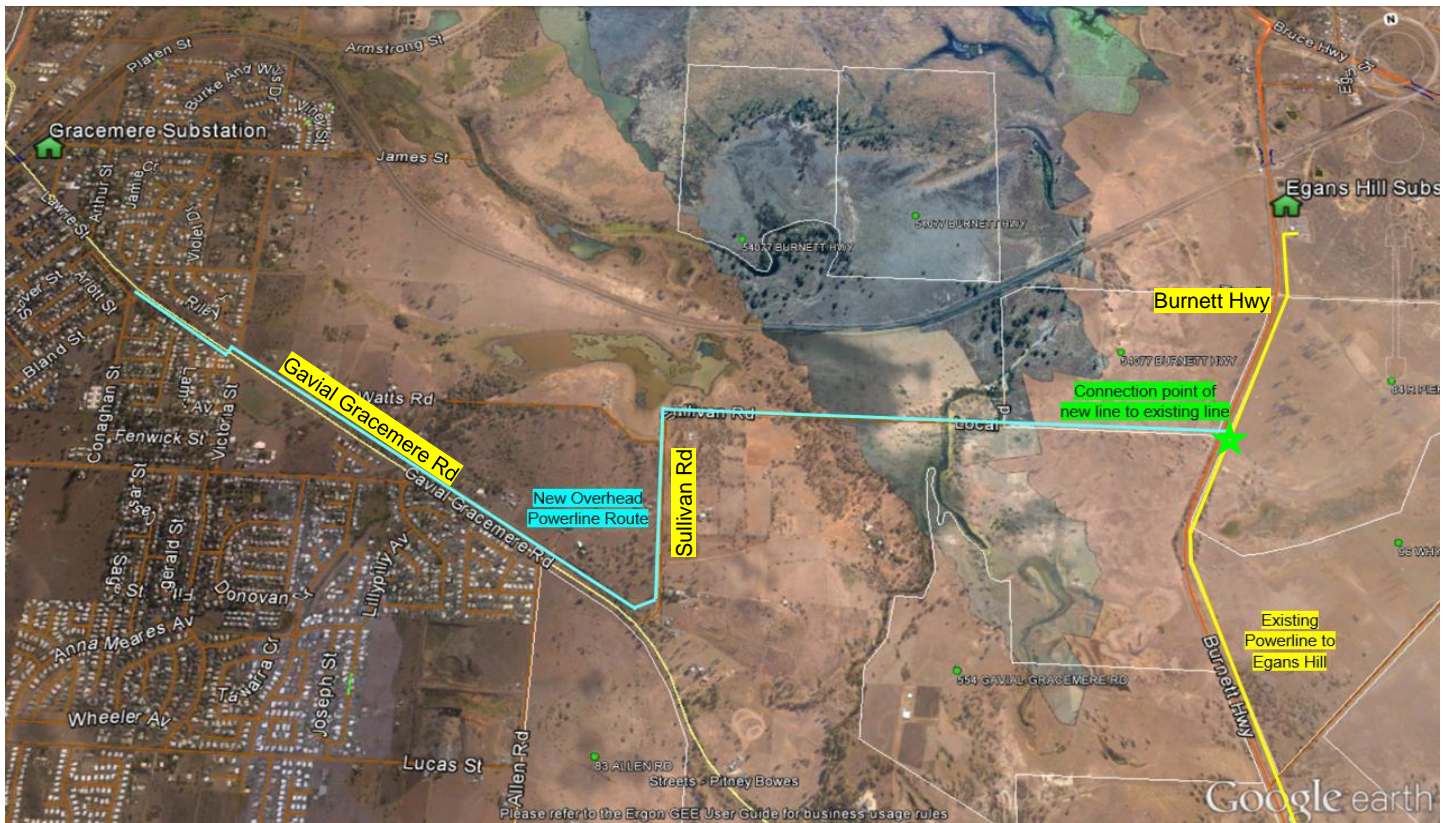
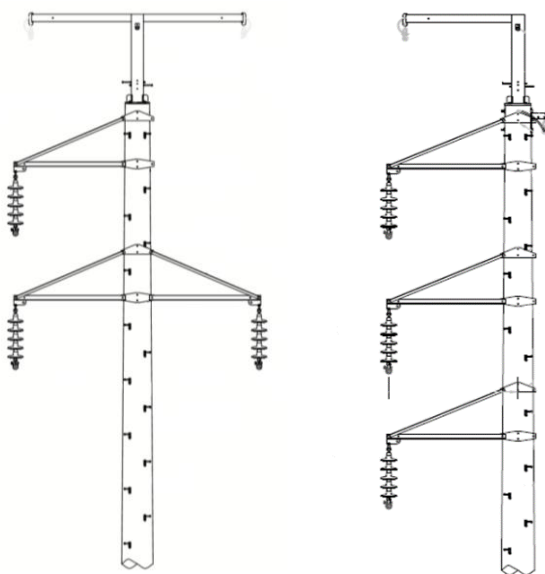


Fig 2 – New overhead powerline route to Egans Hill substation.

We're planning two types of concrete pole designs for the powerline. Most of the line route is in open space with little vegetation, particularly along Gaviai Gracemere Road, so we can use a standard design with concrete poles in these sections – see Figure 3a. However, in sections along Sullivan Road near the wetlands where we don't have as much room, the line will convert to a compact construction – see Figure 3b. The design reduces the amount of vegetation clearing required, while still maintaining clearances for safety and reliability.



A - Standard design

B - Compact design

Fig 3 – Standard and compact pole design for 66kV powerline

In early June we will begin to prepare the line route for the installation of the new overhead powerline. To ensure we have a safe and reliable powerline, we will trim and remove selected vegetation along the path of the powerline.

We have already sought approval from the Department of Transport and Main Roads, who are the owners of the road reserves along Gaviai Gracemere Road, where most of the powerline will run.

As well, we have spoken with the affected land holders in Sullivan Road and briefed the Rockhampton Regional Council of our plans for selected clearing of the powerline corridor.

We may also need to establish some temporary access points for the truck carrying the poles so that they can be safely delivered to site. If maintenance work for improved access is required, we will speak directly with the landowners.

Once the line route has been cleared, we will commence standing the poles and running the powerline. We anticipate the powerline will be connected and energised by December 2022.

Getting in touch with us

For more information about the Gracemere substation project, to provide feedback, or **to register for future updates via email or SMS**, please contact our Senior Community Engagement Advisor, Kate Austin - on 1300 653 055 or email us at: NetworkProjectEngagement@energyq.com.au

You can also keep up to date on the project by visiting our project website: www.ergon.com.au/gracemere-project