

## Fact sheet Geotechnical Investigations

September 2024

### What is HumeLink?

HumeLink is one of Australia's largest energy infrastructure projects connecting renewable energy sources to the grid, increasing availability and market competition and helping to put downward pressure on energy prices in Australia.

The project consists of 365 kilometres of 500 kV overhead transmission lines connecting Wagga Wagga, Bannaby and Maragle, and new or upgraded infrastructure at four substations. HumeLink is critical to making more affordable, reliable and renewable energy available to the people of NSW and is a priority project for the Australian Energy Market Operator (AEMO) and the Commonwealth and NSW governments. Subject to government approval of HumeLink, the proposed construction will occur in two sections known as HumeLink East and HumeLink West.

To view HumeLink's interactive route map go to [transgrid.com.au/humelink](https://transgrid.com.au/humelink).

### Geotechnical investigations

Geotechnical investigations assess the physical properties of the soil and rock beneath the ground. Geotechnical techniques include drilling bore holes and taking soil and rock samples.

These samples undergo a series of laboratory tests to determine properties such as the strength and chemical

composition of the ground, to inform decision making on the location of project structures.

The collected information is also used by engineers to inform the design and construction of transmission towers, the type of foundation needed, how deep foundations need to be and what type of drainage may be required.



Image: A standard bore rig with drill and support vehicle.

## When will the work happen?

The geotechnical work will take place during the standard construction hours of **Monday to Friday 7am – 6pm** and **Saturday 8am – 1pm** unless otherwise agreed with the landowner. Work at each site is expected to take between one and three days to complete (weather permitting).

We will contact landowners seven days before proposed entry to private property to discuss these investigations. Any conditions of entry will be documented and communicated to all project team members.

## What is involved?

The work crew will establish the work zone with a truck, small drilling rig and support vehicles - typically a ute and a water truck. During the work, a crew of approximately three to five people will attend the site, including a lead driller, a drilling hand or offsider and an engineering geologist who logs activity and earth samples.

Work areas are typically around 15 metres by 10 metres. This allows us to create a safe work zone, with sufficient space to store the excavated soil that will be used to backfill the boreholes.

Each borehole is approximately 10 centimetres in diameter. The depth of each borehole may range from 5 metres to 25 metres, depending on the ground conditions and the depth and strength of the bedrock. Each borehole is backfilled with the soil removed during drilling. After backfilling, there will be a slightly raised or mounded surface to prevent water pooling (this will compact over time). If the project needs to revisit the site to conduct further testing, the borehole will be capped with a cement grout mixture and made safe until testing is complete. The cap will then be removed and the hole backfilled with excavated soil as part of rehabilitation.

## Ensuring site safety

The safety of workers and the community is the HumeLink project's top priority during all works. All vehicles, equipment and workers accessing private property will

comply with [HumeLink's Biosecurity Procedures](#), including inspecting vehicles, equipment and clothing, before entering and leaving properties.

Work vehicles are equipped with spill kits to ensure any spills of fuel, oils or chemicals used in the drilling process are promptly cleaned up and appropriately disposed of.

Water used during borehole drilling is contained in a purpose-built tank and recirculated, preventing the water from entering any surrounding waterways.

All produced waste is collected and disposed of at an approved disposal facility.

## Ongoing site investigations and associated activities

Site investigations and associated activities will continue across the alignment for the remainder of 2024.

The work is undertaken by HumeLink East and HumeLink West delivery partners, in line with the relevant guidelines and approvals.

These investigations will inform the detailed design of the project. All work notifications are available on the [HumeLink East](#) and [HumeLink West](#) websites.



Image: HumeLink project team following biosecurity protocols.

## Connect with us

Transgrid is committed to working with landowners and communities through the development of HumeLink. Please connect with us for more information.



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