



A similar cable project in progress

Ausgrid's Merewether Subtransmission substation (STS), located at Coady Street, Hamilton South, is a major electricity supply point for a number of zone substations in the Newcastle and Lake Macquarie council areas. These substations are supplied at 33,000 volts by a series of cables that originate from Merewether STS.

Several of these cables are to be the subject of a replacement program that will be implemented over the next five years.

Project need

This replacement program is necessary as the original cables are reaching the end of their serviceable life. Timely replacement of these assets ensures stable and secure electricity supply for our customers.

A total of five cable sets will be replaced as part of this program. The work will be done in stages to ensure supply is maintained during the installation and to minimise disruption and inconvenience to residents within a five kilometre radius of Merewether STS.

Cable route selection

The large number of cables that originate from Merewether STS, means that the available routes for the new cables are limited. This is compounded by the presence of existing utility services such as town-water, storm water, sewer, telecommunications and gas lines beneath local streets.

Ausgrid also seeks the shortest and most feasible route from Merewether STS to each cable's connection point on the network to ensure the most cost-efficient delivery of the replacement programs.

All of the cable sets to be replaced are direct buried. The retirement of Charlestown, Adamstown and Dudley 33/11kV zone substations means that we can re-use these corridors for the installation of new conduits (plastic pipes) for the replacement cables.

Project status

The initial project (see dates on p4) will see the replacement of two cable sets that follow a route from Merewether STS to King Street, Adamstown. The new cables will be installed within conduits in a common trench between Merewether STS and King Street, Adamstown. Spare conduits will also be installed for future replacement or to cater for increased electricity demand in the future, as required.

The common section of the route will be via Chatham Street, Fellowes Street, Lockyer Street and King Street. One cable transitions to a new Underground to Overhead connection pole (UGOH) in King Street, near the entrance to the Merewether Golf Club.

The second cable will turn from King Street into Ella Street, Belmore Street and then to a UGOH in O'Connell Park, near the site of the old Adamstown zone substation.



— Feeder 766 route
 — Feeder 760 route
 ○ Joint Bay/Pulling Pit
 ● New UGOH locations are indicative

Cable route map

Community involvement

As noted on the first page, the large number of cables requiring separate routes from Merewether STS, coupled with other infrastructure (such as sewer, water, storm water, gas and telecommunications) already present beneath local roads, means there are limited route options.

Ausgrid has selected the proposed routes that provide the shortest possible distance while avoiding existing service installations, and re-using old cable routes wherever possible.

Ausgrid will keep the residents along the route informed of the project's scope and timeframe, and provide advance notice where there may be impacts on property access during the trenching and conduit installation.

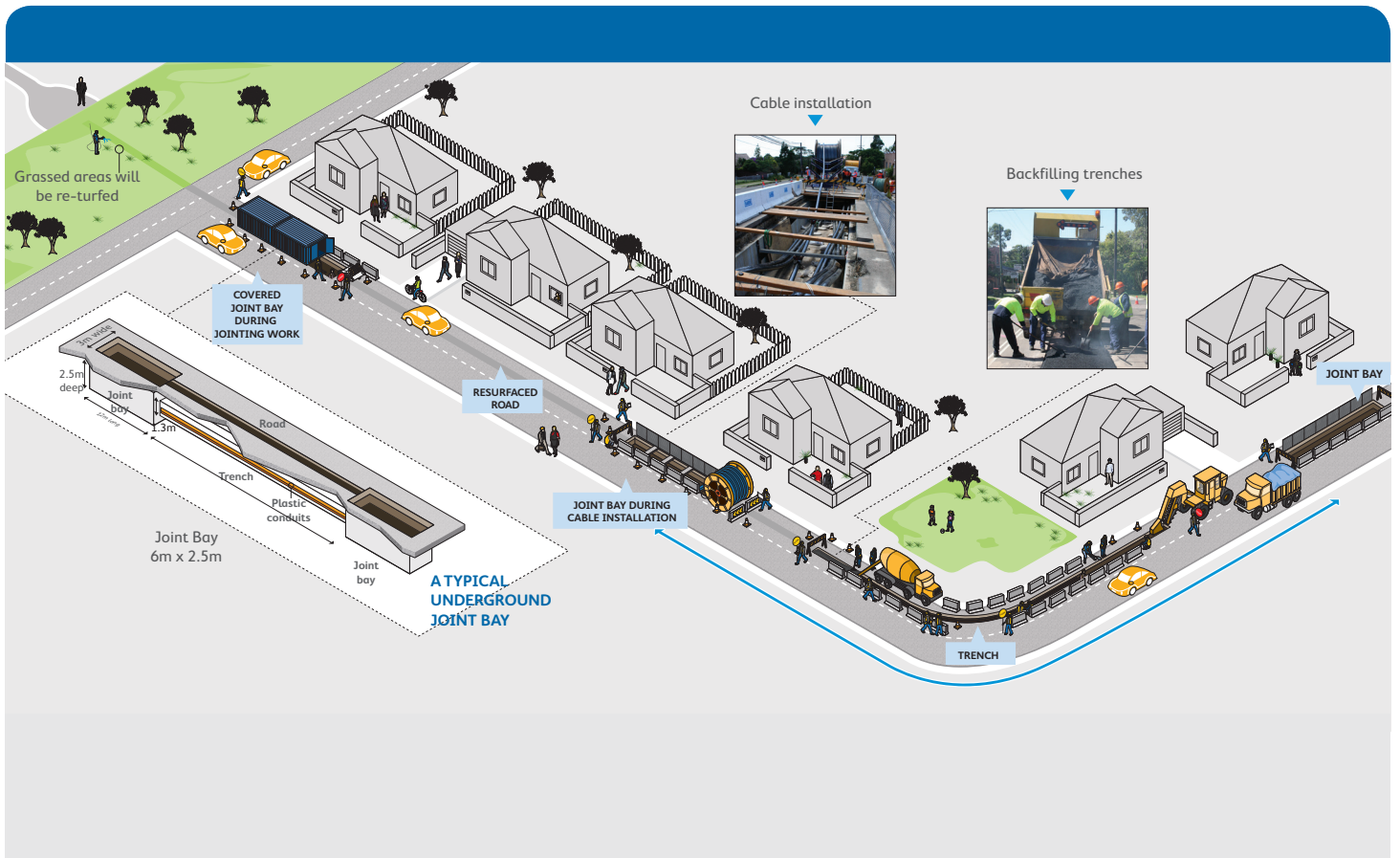
Project approval process and environmental assessment

An Environmental Impact Assessment (EIA) is being prepared for the project in accordance with Part 5 of the Environmental Planning and Assessment Act 1979 and Clause 228 of the Environmental Planning and Assessment Regulation 2000.

The EIA investigates the potential environmental impacts associated with the construction, operation and maintenance of the proposed infrastructure. It also recommends mitigation measures as required to ensure any impacts are kept at acceptable levels.

Ausgrid assesses the project for construction approval based on information contained in the EIA and any other relevant documents.

Because the work impacts local streets and O'Connell Park, Ausgrid is also consulting with Newcastle City Council on this project and this engagement will be included in the project's environmental assessment.



Underground cable installation illustration

What to expect during construction

The trenching component of the project will involve noise and dust, and temporary traffic and parking disruptions, which we will work to minimise as much as possible.

Construction activities will include:

- Saw cut road surfaces and excavate trench, approximately 800mm to 1400mm wide, to lay conduits to house the new cables.
- Filling trench with a specialised concrete mix known as Fluidised Thermal Backfill.
- In most areas, the permanent restoration will be done immediately after the cables are installed. Joint bays and pulling pit areas will be done following cable jointing and testing.
- The crossing of Glebe Road from Chatham Street to Fellowes Street may require night works. This is to minimise disruption to day time traffic flows on Glebe Road. Residents in the immediate vicinity will be given prior notice if night works are required.

The trenching, conduit installation and resurfacing component of the project will take about three days outside each property depending on ground and weather conditions.

Following completion of the trenching works, new cables will be fed into the conduits and pulled to their connection points. One joint bay is required in Fellowes Street, near the Lockyer Street intersection. A pulling pit may also be required in Ella Street, near the intersection with Belmore Street.

Ausgrid will be in touch with residents near to the proposed location of the joint bay to discuss any further impacts and to outline what to expect during the various stages.



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Key dates

June-Dec 2016

Project planning

Investigate available routes for new cables.

Sept-Nov 2016

Environmental assessment

Identification and consideration of environmental factors associated with construction and operation.

Nov-Dec 2016

Project approved for construction

Project approved based on environmental assessment.
Community information re project.
Contractor engaged for conduit installation.

Jan-June 2017

Construction

Trenching, installing conduits, temporary reinstatement of road and park areas.
Cable installation and connection to the network.
Regular community updates.

Contacting us

You are welcome to contact us with any enquiries:

Call 1800 152 048 (free call from fixed phones)

Email majorprojects@ausgrid.com.au

Visit www.ausgrid.com.au/Merewether cable replacements



Interpreter service 131 450

