



Sydney's new metro train

Power Supply Upgrades

Sydney Metro

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro City & Southwest extends the new metro network from the end of the Sydney Metro Northwest at Chatswood, under Sydney Harbour, through new railway stations in the CBD and south west to Bankstown – a total of 66 kilometres of metro rail.

When services start in 2024, there will be a train every four minutes in the peak – customers won't need a timetable, they'll just turn up and go.

Traction power supply

In order to operate the Sydney Metro trains, a new traction power system, including substations and a power supply cable, will be installed between Marrickville and Bankstown.

The Sydney Metro network traction power system is designed to be segregated and operate independently from the Sydney Trains network.

All Sydney Metro traction power infrastructure will be controlled and monitored from the Sydney Metro Trains Facility at Rouse Hill.

New Substations

Five new substations will be built to power the metro trains. The substations will be above ground and positioned in secure compounds within the rail corridor.

The Environmental Impact Statement has assessed proposed locations at:

- ▶ **Dulwich Hill** – southern side of the railway corridor at Randall Street
- ▶ **Canterbury** – southern side of the railway corridor, north of Hutton Street and west of the Melford Street overbridge
- ▶ **Campsie** – southern side of the railway corridor, north of Lilian Street and east of Carrington Street
- ▶ **Lakemba** – southern side of the railway corridor, north of The Boulevard and west of Taylor Street
- ▶ **Punchbowl** – southern side of the railway corridor, north of South Terrace and east of Scott Street.




The location of the substations are indicative and remain subject to ongoing detailed design.

Electric and magnetic fields

Transport for NSW will meet relevant health standards for electric and magnetic fields (EMF), which are found wherever electricity is present. This includes home and office appliances, substations and electrical cables.

The Draft Radiation Standard - Exposure Limits for Magnetic Fields (Australian Radiation Protection and Nuclear Safety Agency, 2006) provides exposure limits that are typically applied when considering electric and magnetic fields from new developments. Transport for NSW will ensure that the exposure limits for the local community suggested by the Draft Radiation Standard will not be exceeded within public areas.

Appliance measurements were taken at typical distances experienced by users.

Common EMF Sources	Range of measurements (Milligauss)
 PC	2-20
 Refrigerator	2-5
 Substation	1-8 (at substation fence)

Source ARPANSA

New power supply cable

To provide a reliable source of power to the new substations, a 3.5 kilometre, high voltage electricity supply cable is proposed. It will be installed between the Campsie substation and the existing Canterbury substation, which is located about one kilometre south of Canterbury Station in Earlwood.

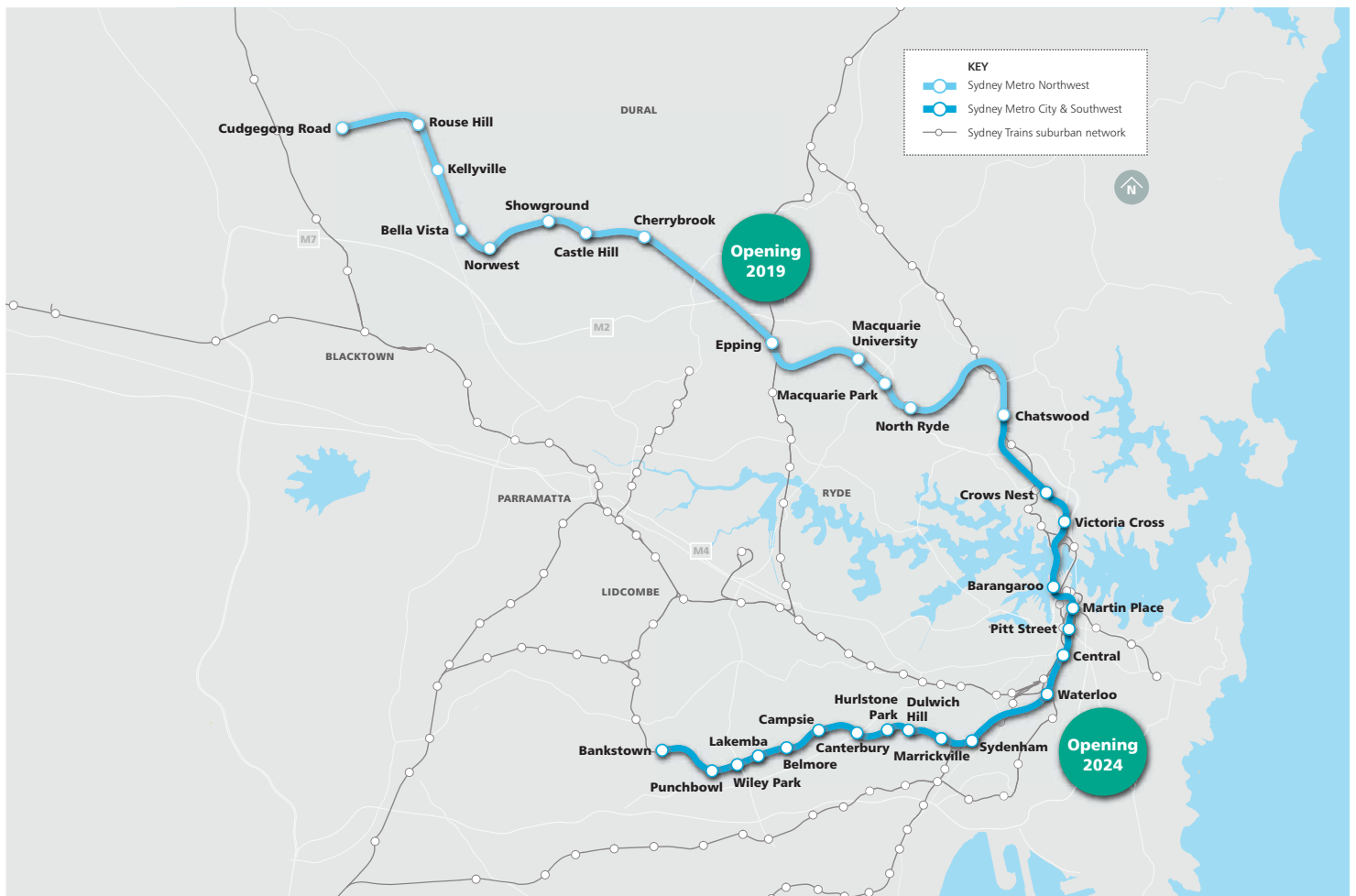
The route for the cable would be about 3.5 kilometres and be built under the following roads: Beamish Street, South Parade, Phillips Avenue, Canterbury Road, Fore Street, Burlington Avenue, Karool Avenue/River Street, Spark Street and Mooney Avenue. The route will also traverse Hughes Park to the south of Canterbury substation.

Have your say?



The Environmental Impact Statement for the Sydenham to Bankstown upgrade is on public exhibition until **8 November 2017**.

The Environmental Impact Statement and its accompanying documents may be viewed on the NSW Department of Planning and Environment website: www.majorprojects.planning.nsw.gov.au and www.sydneymetro.info.



If you require the services of an interpreter, please contact the **Translating and Interpreting Service on 131 450** and ask them to call **Sydney Metro on 1800 171 386**. The interpreter will then assist you with translation.