



# MELBOURNE METRO RAIL GEOTECHNICAL AND SITE INVESTIGATIONS

## About the Melbourne Metro Rail Project

**The Melbourne Metro Rail Project will expand the City Loop, enabling major improvements in capacity, reliability and efficiency of train lines serving Melbourne's growth areas in the north, west and south-east.**

Melbourne Metro involves construction of two nine-kilometre rail tunnels from South Kensington in the west to South Yarra in the east and five new underground stations.

The project will connect the Sunbury and Cranbourne / Pakenham lines for the first time, creating a new end-to-end train line through the inner city.

It will bring more people into the city, make central Melbourne a more attractive option for businesses, and further position Melbourne as one of the world's most liveable cities.

## What's happening?

The Melbourne Metro Rail Project is currently in the planning and development phase. To help us understand how to build the tunnels and stations we need to find out more about the ground conditions beneath Melbourne.

Starting in mid 2015 and running through until mid 2016, the Melbourne Metro Rail Authority will complete a range of site investigations between South Kensington and South Yarra, including the CBD, to support the development of a robust reference design and inform the planning process.

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**THE MELBOURNE METRO RAIL AUTHORITY IS COMMITTED TO KEEPING THE COMMUNITY INFORMED ABOUT WORKS IN THEIR AREA.**

These investigations will include:

- Confirming sites are free of underground electricity, power, water, gas and communications services before starting investigations
- Drilling boreholes up to 50 metres deep to take rock and soil samples
- Monitoring of groundwater levels in some locations
- Measurement of ground gas levels, and
- Testing soils and groundwater.

## Why are site investigations needed?

Just like the landscape above ground has features like hills, rivers and different types of soil, underground Melbourne has its own landscape.

This landscape includes a variety of geological conditions such as hard rock, softer rocks and clays, silt deposited by rivers and groundwater.

To carefully plan how the Melbourne Metro tunnels and new stations will be built, we need to develop a greater understanding of the geological conditions beneath our city.

The work that will be done over coming months will add to information gathered from previous investigations and studies and fill in gaps in information from areas that haven't been looked at in detail before.

Given several of the areas we will be working in have been used for industrial purposes in the past, we also need to assess the environmental status of soil and groundwater so that potential contamination can be appropriately managed during the construction phase.



### What will the work involve?

In most cases, the site investigations will be completed using a drilling rig similar to the one pictured above.

The rig will drill boreholes approximately 100mm in diameter and up to 50 metres deep, allowing engineers to investigate ground conditions at various depths.

Investigations at each site will generally take around one week to complete.

In some locations a groundwater monitoring well will be installed to allow sample collection and measurement of groundwater levels. These wells will be monitored for several months.

The work will produce a small amount of noise, similar to a medium-sized truck engine, and will be carried out during periods identified to mitigate against impacts to stakeholders. It is noted that some night work may be needed to minimise disruption to transport services.

### Where will work take place?

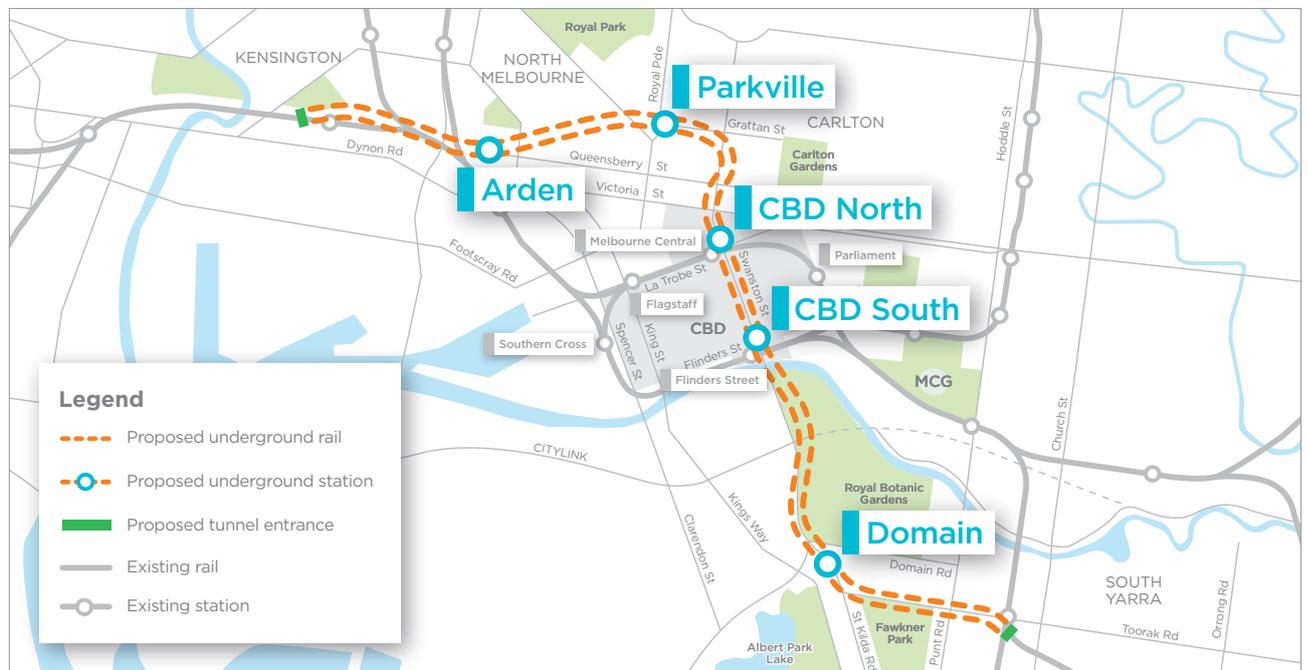
Investigation work will take place at more than 100 locations in the South Kensington, North Melbourne / Arden, Parkville, CBD, Domain and South Yarra areas. Further investigation may be required at isolated locations across the metropolitan network relating to wider network improvements associated with the Project.

We appreciate there may be some inconvenience caused as a result of these investigations. We will minimise disruption wherever possible and thank you for your understanding while we complete these important works.

### Keeping you informed

The Melbourne Metro Rail Authority is committed to keeping the community informed about works in their area.

We will notify nearby local residents and businesses in advance of any works that are planned for their area and work to keep disruption to a minimum.



### More information

To find out more about the Melbourne Metro Rail Project and register for future updates:

- [mmrailproject.vic.gov.au](http://mmrailproject.vic.gov.au)
- 1800 551 927
- @mmrailproject
- Melbourne Metro Rail Authority

