

## M4-M5 Link Tunnels

Newsletter | January 2019

Sydney's population is set to grow by more than one million people in the next 10 years, with our road network expected to cater for an estimated 19 million trips per day by 2031.

The NSW Government is spending a record \$51.2 billion on road and public transport projects over the next four years to deliver an integrated transport solution for greater Sydney.

WestConnex is part of the Government's vision for supporting Sydney's growing populations. It will provide safer, faster and more reliable travel, and make it easier for businesses and communities to connect.

The M4-M5 Link is the crucial final stage of WestConnex, connecting the New M4 tunnels with the New M5 tunnels, allowing the full benefits of WestConnex to be realised.

### The M4 - M5 Link Project Overview

The M4-M5 Link will be built in two stages:

1. M4-M5 Link Tunnels
2. Rozelle Interchange and Iron Cove Link

Lendlease Samsung Bouygues Joint Venture has been selected to design and construct stage 1 of the project, 7.5km twin tunnels connecting the New M4 at Haberfield with the New M5 at St Peters. Construction of the M4-M5 Link Tunnels has recently started and will be open to traffic early 2023. Work will include:

- Construction of twin mainline tunnels that will generally accommodate up to 4 lanes of traffic in each direction
- Construction of tunnel connection points that will lead to the future Rozelle Interchange and Iron Cove Link
- Construction of a Motorway Operations Complex including a ventilation facility at Campbell Road, St Peters
- Minor surface level tie-in work at the Wattle Street

### Overview of WestConnex and related projects





WestConnex New M4 tunnel under construction 2017

## Current work

Work has started at three locations along the M4-M5 Link Tunnels alignment in preparation for tunnelling activity to start later this year. Work is currently being carried out at:

- Campbell Road tunnel and civil site, St Peters
- Pyrmont Bridge Road tunnel and civil site, Annandale
- Parramatta Road East and West sites, Haberfield and Ashfield

Current work activities include demolition of existing buildings, site establishment, relocation of utilities and set up of worker parking.

Tunnelling from the St Peters and Annandale sites is expected to start around May 2019. The existing M4 East construction site at Northcote Street is subject to approval of the EIS modification while the existing Wattle Street construction site in Haberfield will be handed over to the M4-M5 Link Tunnels project in March 2019. Tunnelling from both these sites is expected to start from around March/April 2019.

## Building the M4-M5 Link tunnels

The average depth of the M4-M5 Link Tunnels is around 35-metres, with shallower sections approaching the interchanges and portals. At their deepest point, tunnels would be up to 58-metres below ground-level.

Ground conditions along the alignment are ideal for tunnelling as the majority of the M4-M5 Link would be built through good quality Hawkesbury Sandstone, with short sections near the entry and exit points at St Peters and Haberfield constructed in shale.

Tunnelling activities are approved to take place 24 hours a day, seven days a week. Some residents above the tunnels may notice some vibration and noise impacts where activities are directly below or nearby their property. Around 25 metres of tunnel is expected to be excavated per week, except for shallow cover sections of the ramp tunnels at the St Peters and Haberfield sites where progress will be slower due to shallower depths.

In comparison to the M4-M5 Link Environmental Impact Statement (EIS), some aspects of the design have changed, including some areas that now have shallower tunnel depths. The EIS was based on a reference design which has since evolved to take into consideration a number of factors including removal of the Darley Road mid-point tunnelling site. The optimisation of the alignment has resulted in an improved design with the tunnels to be less steep, resulting in a smoother ride which will also help to reduce emissions.

An interactive map showing the location and depth of the tunnel in relation to properties is now available on the WestConnex website and can be accessed at [westconnex.com.au/tunnelling](http://westconnex.com.au/tunnelling) by clicking on the tunnelling map link. Once tunnelling has commenced, the tunnel tool will allow you to view the location of the roadheaders in real-time.

Excavation of the M4-M5 Link Tunnels will be carried out by more than 25 roadheaders. For more information on the construction methodology please refer to the M4-M5 Link Tunnels Tunnelling factsheet at [westconnex.com.au/M4-M5LinkTunnels](http://westconnex.com.au/M4-M5LinkTunnels).

## Protecting property

We realise you may have concerns over vibration and noise impacts on properties that are above or nearby the tunnel alignment. Before any work starts, extensive design development is carried out to ensure the tunnels are safe to build and operate.

Design development considers existing geological information, topography, water courses, existing underground infrastructure, existing and proposed developments on the surface. In line with the Ministers Conditions of Approval, the designers also carry out a settlement assessment to predict what, if any settlement, is expected from the tunnelling work. This information is then used to apply appropriate tunnel support designs to mitigate settlement.

Furthermore, all properties within 50 metres of the tunnel alignment will be offered a property condition survey before and after construction. This does not imply that damage is expected from tunnelling activities but is a precautionary step in the unlikely event damage is caused. The survey records the property's condition prior to start of tunnelling work nearby.

Property condition survey offers are being sent to property owners progressively over the next 18 months in advance of tunnelling work in their area. If any damage is caused by the M4-M5 Link Tunnels Project, it would be repaired at no cost to property owners. For more information about this process please refer to the property condition survey fact sheet which is available at [westconnex.com.au/M4-M5LinkTunnels](http://westconnex.com.au/M4-M5LinkTunnels).

Over the next six months geotechnical investigations will be progressively undertaken at multiple locations along the tunnel alignment. This work is being carried out to confirm ground conditions and groundwater levels in preparation for start of tunnelling and to further validate design development completed to date.

Once tunnelling starts, above ground and in tunnel monitoring will monitor work progress and surveying will be regularly carried out along the tunnel alignment to confirm construction work is in line with existing design assumptions and any changes to ground conditions such as settlement is observed and recorded.



*Tunnelling roadheader machine*

## Did you know?

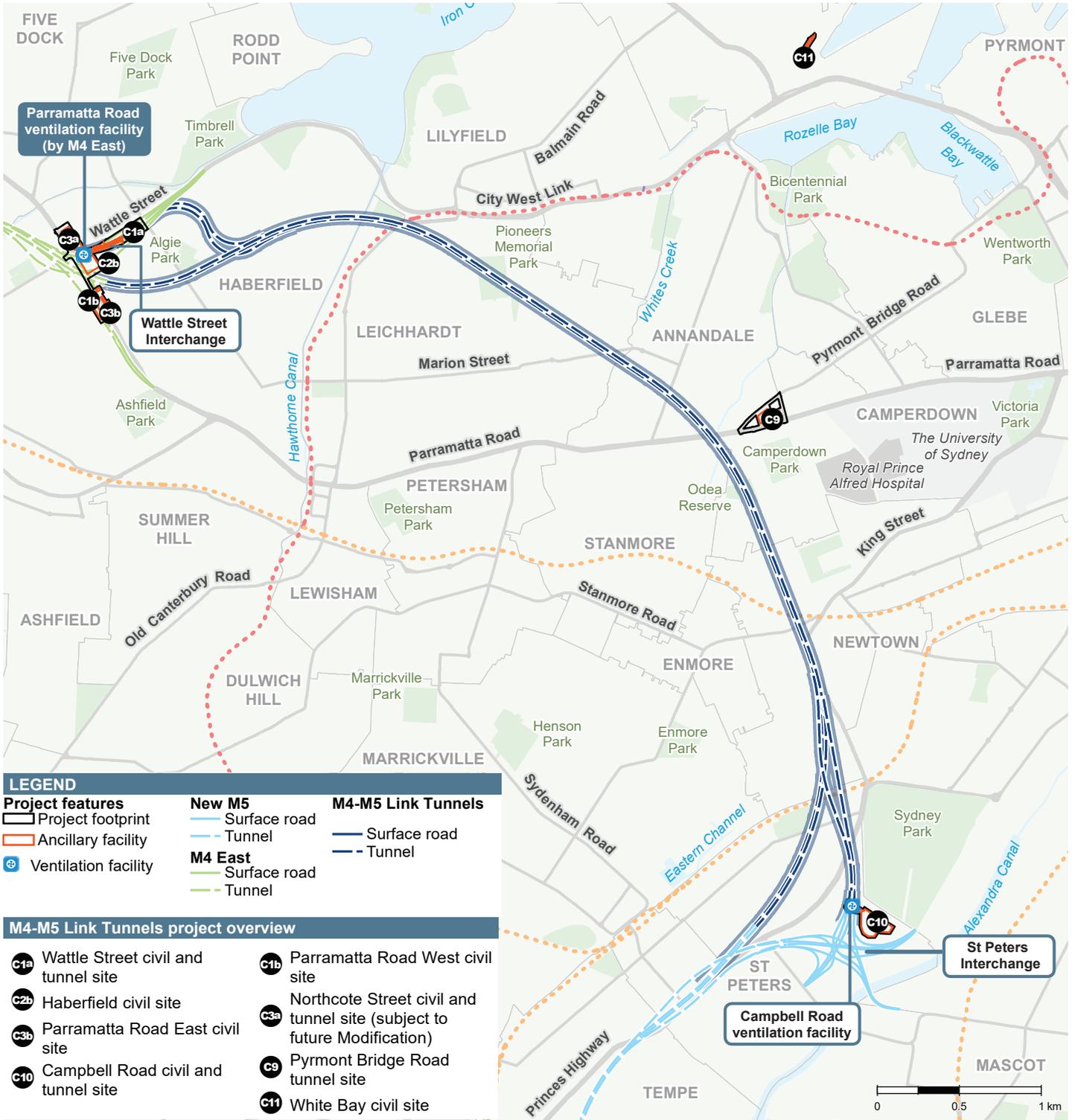
- Around 300 million years ago, Antarctica's mountain ranges produced the sands that were carried to the east coast of Australia, forming the Hawkesbury Sandstone that is so prominent in the region today.
- The M4-M5 Link Tunnels will cross over the Woolloomooloo and the Luna Park Fault Zones. These faults have not moved for more than 100 million years.
- The M4-M5 Link Tunnels go underneath Hawthorne Canal which was one of the first nine stormwater channels constructed in Sydney before 1900 and was named after John Stuart Hawthorne, a member of the New South Wales Legislative Assembly.

## Keeping you informed

We are committed to keeping you informed and will provide regular information on the M4-M5 Link Tunnels through direct mail, email notifications, community updates, local papers, face-to-face activities and community information sessions.

Prior to start of tunnelling, the team will be holding community information sessions throughout 2019 at various locations along the tunnel alignment. Members of the team will be available to provide information about tunnelling including what to expect, and answer any questions you may have. Further details regarding these sessions will be provided to you closer to the time.

# M4-M5 Link Tunnels project overview



## Community Information Centre

Drop into our Community Information Centre at 201-205 Parramatta Road, Haberfield (corner of Alt Street), opening 4 February 2019. Operating hours are 9am-5pm Monday to Friday - excluding public holidays.

You can contact the WestConnex info line on **1800 660 248** and ask to speak to a member of the LSBJV M4-M5 Link Tunnels team. You can also email [info@m4-m5linktunnels.com.au](mailto:info@m4-m5linktunnels.com.au) or visit [westconnex.com.au/M4-M5LinkTunnels](http://westconnex.com.au/M4-M5LinkTunnels) for more information.



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