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Roadheaders are being used to excavate the station cavern at Pyrmont Station.

# Ready for tunnelling at Pyrmont Station

The NSW Government is delivering Sydney Metro West –a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, link new communities to rail services and support employment growth and housing supply.

Sydney Metro West stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street in the Sydney CBD. Two potential station locations are being investigated west of Sydney Olympic Park, including one at Rosehill Gardens which could support a significant increase in housing.

John Holland CPB Contractors Ghella Joint Venture (JCG) has been awarded the contract to deliver 3.5 kilometres of twin metro rail tunnels between The Bays and Hunter Street and excavate the Pyrmont and Hunter Street metro stations. This work is part of the Eastern Tunnelling Package (ETP) for Sydney Metro West.

## Pyrmont construction activities

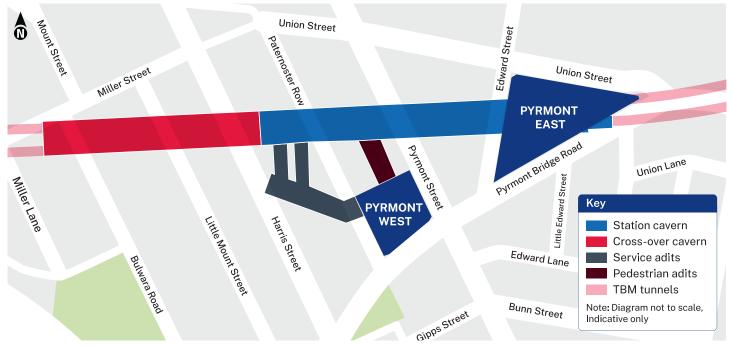
The project is preparing for a major program milestone with tunnelling about to start at the eastern site in Pyrmont. A roadheader will soon start excavating the underground station cavern, progressing west.

Site establishment activities are continuing at the East and West sites, including construction of acoustic sheds at both sites. The shed at Pyrmont East is almost fully constructed and will enclose most tunnelling activities, including the loading of trucks with ground material from the cavern. At the same time, work continues on the surface to excavate the two shafts for the future station.

Over the next six months the acoustic sheds will be complete and tunnelling operations fully established.







Site map of Pyrmont Station.

# What's happening in Pyrmont

## Tunnelling

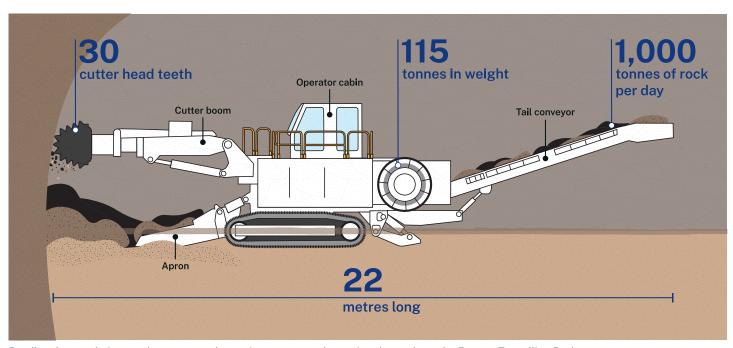
Three roadheaders will work underground to excavate the station cavern and crossover cavern in Pyrmont. The caverns have a combined length of 316 metres.

Roadheaders are powerful rock cutting machines that are often used for road and rail tunnel projects. With their highly advanced computer systems, roadheaders can accurately excavate in a wide range of rock formations.

Using a rotating cutterhead attached to a boom, they can freely swing from side to side or up and down. The cutterhead has 30 teeth that can cut through rock three times harder than concrete.

Like an excavator, a roadheader has a crawler track which allows it to move forward as it cuts away the rock face. The excavated material is moved through the middle section of the roadheader via two conveyors into trucks for removal and reuse offsite.

The first roadheader will arrive in early July and start tunnelling from the Pyrmont East site, heading west. The project's first tunnel boring machine (TBM) named Jessie has started tunnelling towards Pyrmont and will excavate approximately 90 metres per week as tunnelling progresses. The second TBM will begin its tunnelling journey later this year.



Roadheaders are being used to excavate the station caverns and associated tunnels on the Eastern Tunnelling Package.

## Six month construction lookahead

Activity (subject to change)	Jul	Aug	Sep	Oct	Nov	Dec
Site establishment	•••	•••	•••			
Ground support	••	••	••			
Tower crane demobilisation			••			
Steel platform installation	••	•••	• •			
Acoustic shed construction	••	••	• •	••	••	••
Shaft excavation	•••	•••	•••	•••	••	••
Cavern excavation (tunnelling)	••	••	• •	••	••	••
Cavern permanent lining						••
Pyrmont East  Pyrmont West  Some out of hours works required						

# Managing impacts

Construction activities may generate increased noise and vibration and will be mitigated on site, where possible. We aim to reduce impacts on the community and the environment by:

- Implementing regular respite breaks for high noise activities
- Scheduling high impact activities during standard construction hours
- Using onsite dust suppression such as water cannons, misters and hoses
- Directing lighting away from properties
- Installing an acoustic shed
- Installing a steel platform to reduce road and footpath impacts
- Installing noise blankets around high noise equipment.



Water mist is used to control dust during hammering activities.

# Heritage highlights

The Pyrmont East and West sites are located near the Pyrmont Conservation Area, which consists of seven streets with heritage value-listed buildings and streetscapes which date back to the 1860s and 1870s.

This area provides a snapshot into the working class history of Pyrmont, showing how the city of Sydney dealt with a rapid growth in the population during the mid-late 19th century.

Many of the high-density terraces and semi-detached townhouses retain their heritage value today and the industrial buildings have been converted to either residential or commercial properties.



The Duke of Edinburgh Hotel in 1979; this is now known as the Harlequin Inn.

# Planning update

Last year, Sydney Metro confirmed changes to the tunnel alignment and tunnel features between The Bays and Sydney CBD as a result of ongoing detailed design. These changes included minor tunnel realignment between The Bays and Hunter Street in Sydney CBD, relocation of the crossover cavern from The Bays Station to Pyrmont Station, and an additional excavation at Hunter Street Station east. These changes were assessed in Consistency Assessments relating to the planning approval.

Sydney Metro West has prepared a separate Consistency Assessment for the operational aspects of the changes, including the aspects related to the fitout, testing and commissioning works. The operational impacts have been assessed as being consistent with the relevant planning approval for Rail, Infrastructure, Stations, Precincts and Operations.

For further information, please contact the Sydney Metro West project team on **1800 612 173** or **sydneymetrowest@transport.nsw.gov.au**.



View the consistency assessment here.



Respite periods are in place for high noise work.

#### **Contact us**

If you have any questions or would like more information please contact our project team:

1800 612 173 Community infoline open 24 hours sydneymetrowest@transport.nsw.gov.au
Sydney Metro West
PO Box K659, Haymarket NSW 1240

### Work hours

## **Pyrmont East**

Due to recent noise monitoring results, work hours for shaft excavation at Pyrmont East are now scheduled between 8am and 5:45pm, Monday to Saturday. Residents and businesses will be notified before any out-of-hours work occurs.

## **Tunnelling from Pyrmont East**

Tunnelling will occur 24 hours per day, seven days per week. Further information about potential impacts and expected durations will be provided to the community before tunnelling starts.

Work for high noise activities, such as hammering, at Pyrmont West is scheduled from 8am to 2:30pm, Monday to Saturday. Respite periods, where only low noise activities take place, are scheduled between 7am to 8am and 2:30pm to 6pm Monday to Saturday\*. \*subject to change

# Our community team

JCG has a team committed to working with the community as it delivers the project. The team will play an active role in getting to know and understand the local community to ensure that impacts on residents and local businesses are minimised.

Please contact the JCG community team on **1800 612 173** if you have any questions or would like to provide feedback about the ETP works at Pyrmont. We will continue to keep you updated on the progress of work in your area.

#### Weekly email updates

If you would prefer to receive weekly progress updates by email, please send a request to **MetroTunnelsJCGJV@transport.nsw.gov.au** and we will add you to the distribution list.

#### Sydney Metro Connect - another way to stay informed

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