



An artist's impression of Pymont Station

# Construction starting at Pymont Station

May 2023

The NSW Government is delivering Sydney Metro West, a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, with a target travel time of about 20 minutes between the two centres.

Sydney Metro West stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pymont and Hunter Street in the Sydney CBD.

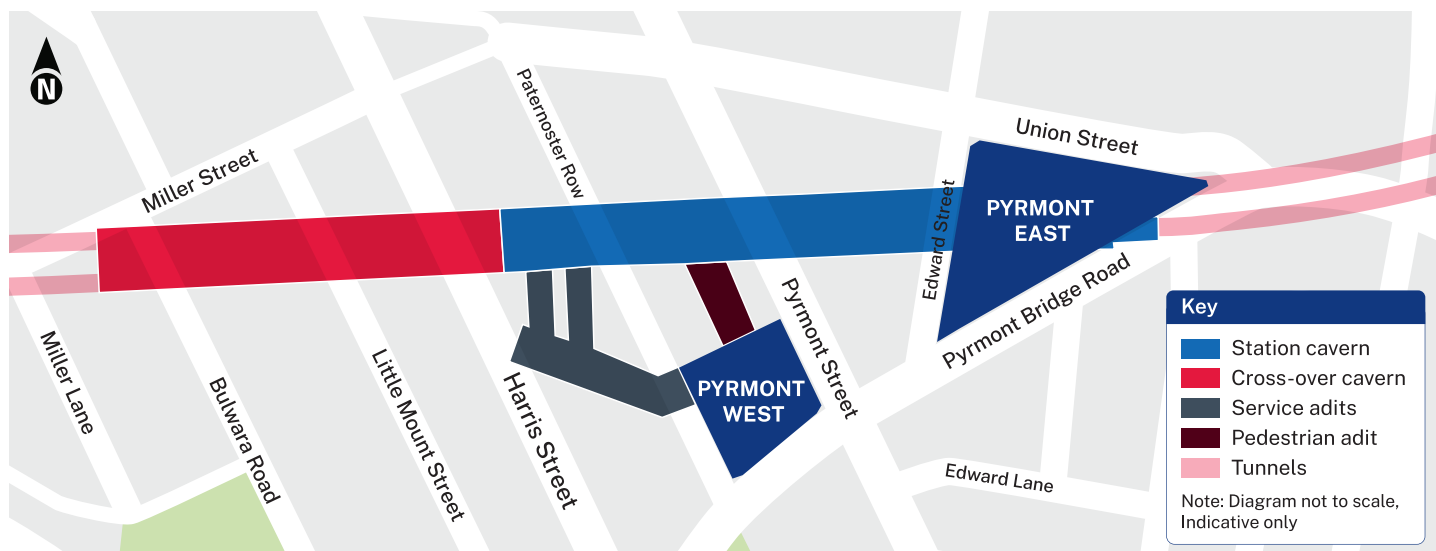
Sydney Metro has been granted planning approval to construct twin underground rail tunnels between Westmead and Hunter Street in the Sydney CBD for Sydney Metro West.

John Holland CPB Contractors Ghella Joint Venture (JCG) has been awarded the contract to build the tunnels for the Sydney Metro West – Eastern Tunnelling Package (ETP).

## Pymont construction activities

The ETP works at Pymont Station include site establishment and demolition, excavating the shafts, caverns and adits, tunnelling of two metro rail tunnels by tunnel boring machines (TBMs) and tunnel support activities, concrete lining of the caverns and tunnels and removing excavated material via trucks.

Site establishment and investigations are continuing in May 2023. This will include the installation of scaffold and hoarding around the sites, internal strip out and the partial demolition of the existing building at Pymont West.



Pymont Station (East and West locations) site map and tunnel alignment

## What's happening in Pymont?

### Site establishment

Work has started at the Pymont East and West sites with building, utilities and geotechnical investigations underway since March 2023.

### Demolition and construction of acoustic sheds

Demolition enabling works were undertaken to prepare the Pymont East and West buildings for structural demolition to start in late May. Following demolition, an acoustic shed will be constructed on each site to enclose tunnelling and shaft excavation activities and minimise impacts to neighbouring residents and businesses.



Pulverisers and shears (pictured) are used to make demolition much quieter

During the planning phase, JCG have made significant effort to reduce the impact of demolition noise on surrounding residents and businesses. While there will be some periods of rock hammering required to break concrete foundations, the team are able to use pulverisers and shears (jaw-like devices attached to excavators) to cut away at the walls and floors of buildings.

### Excavation and tunnelling

JCG will create the underground infrastructure in Pymont including tunnels for the metro trains, a station cavern to house the new station, a crossover cavern to provide a crossing point for trains to cross between tracks, along with service and pedestrian adits.

Building this infrastructure first requires excavation of two station shafts of about 30 metres deep at the Pymont Station East and West sites. Once this depth has been reached, we will horizontally mine the underground station and crossover caverns along with the service and pedestrian adits.

The shaft excavation work will be carried out using hydraulic hammers attached to excavators. The caverns and adits will be constructed using a roadheader, a tunnelling machine with a rotating head to break and excavate rock in a circular motion to create the arched cavern and adit shapes.



Roadheaders are used to excavate underground structures that are different shapes and sizes

JCG will also create the 3.5 kilometres of metro tunnels between The Bays and Sydney CBD using tunnel boring machines (TBMs). Two TBMs will be launched from The Bays and will cross the harbour near the Anzac Bridge, before heading to the new Pymont Station and then under Darling Harbour before reaching Hunter Street Station in the heart of the CBD.



**Station Cavern:** a station cavern is an underground area where passengers will access the Sydney Metro trains. Pyrmont Station cavern will be a single span cavern, which means both tunnels enter the same cavern with a single central platform.



A single span cavern at Victoria Cross Station on the Sydney Metro City & Southwest project

**Cross-over cavern:** a cross-over cavern provides a track crossing point that enables a train to cross between two parallel tracks, ensuring smooth metro service operations. Cross-over caverns are provided at various points along the Sydney Metro alignment and are needed to provide service reliability, safety and operational requirements.



A cross-over cavern at Castle Hill on the Metro North West line

**Adits:** an adit is a passageway built for pedestrian access and services. Adits will be mined to connect the Pyrmont West construction site to the excavated metro tunnels.



A pedestrian adit at Victoria Cross Station on the Sydney Metro City & Southwest project

## Underground infrastructure

Sydney Metro tunnels and underground infrastructure will pass relatively deep below the surface. We use advanced technology and adhere to stringent conditions to ensure this infrastructure is built safely.

Sydney Metro West has been designed to protect items of heritage significance. The project is required to identify any potential impacts to heritage items and implement mitigation measures to manage potential impacts.

## Property condition surveys

Vibration levels are predicted to be well below accepted standards and expert studies indicate damage to any structures is extremely unlikely. As a precaution, property condition surveys will be carried out on properties above or in close proximity to the station, construction site and tunnel alignment. The property condition surveys will ensure there is a documented record identifying any pre-existing conditions prior to construction or tunnelling works.

JCG will contact eligible property owners two to three months prior to tunnelling. Identified property owners are encouraged to take up this offer.

## Managing impacts

JCG is committed to reducing the impact of construction on the environment and local community. Measures we will use include:

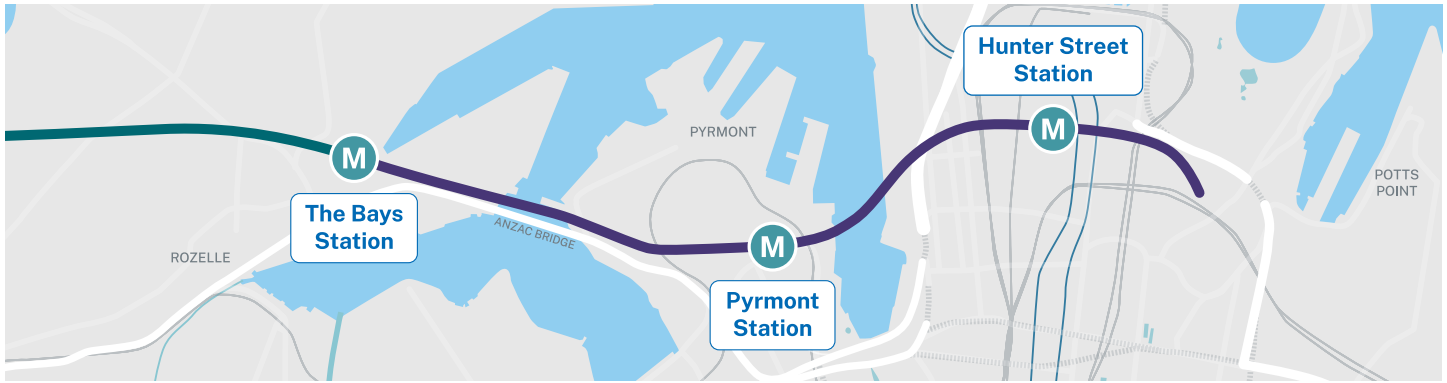
- notifying the community about any upcoming works in the area
- managing and mitigating street-level noise and impacts, including installing noise blankets and performing work during off-peak hours
- selecting lower impact machinery, and planning activities to reduce construction impacts
- managing and mitigating site noise, including installing and working inside acoustic sheds during shaft excavation and tunnelling
- providing respite breaks where possible
- minimising dust by covering loaded trucks and using water trucks as required.

## Modification to project condition D23(d) approved

The Department of Planning and Environment exhibited a Modification to the condition of approval D23(d) for Sydney Metro West – major civil construction between The Bays and Sydney CBD.

This Modification was approved on 19 April 2023. The proposed modified condition allows for tunnelling to be undertaken 24 hours a day, 7 days a week by tunnelling road headers, and other methods, in addition to tunnel boring machines. This is consistent with recent tunnelling projects in Sydney, including other stages of Sydney Metro West.

The Modification approval can be found at:  
[www.planningportal.nsw.gov.au/major-projects/projects/sydney-metro-west-bays-sydney-cbd-mod-1](http://www.planningportal.nsw.gov.au/major-projects/projects/sydney-metro-west-bays-sydney-cbd-mod-1)



Sydney Metro West alignment between The Bays and the Sydney CBD

## Work hours

Works at the Pyrmont Station site will generally take place during standard construction hours, Monday to Friday between 7am to 6pm and Saturdays from 8am to 6pm. Residents and businesses will be notified before any out-of-hours work.

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.

## 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.

### Sydney Metro Connect – a new way to stay informed

Download Sydney Metro Connect onto your smart device to stay informed about current work, project milestones and receive notifications for upcoming work in your area—all in one place. Sydney Metro Connect is available from the App Store or Google Play.

### Weekly email updates

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

## Six month construction lookahead

Activity (subject to change)	May	Jun	Jul	Aug	Sep	Oct
Utilities relocation	● ● ●	● ● ●				
Tree removal and trimming	● ●					
Site establishment (early demolition works, driveway construction, installing scaffold and hoarding around site perimeter)	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
Tower Crane Installation					●	
Start of excavation for temporary shaft						●

Pyrmont East ● Pyrmont West ● Some out of hours works required ●

### Have your say

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](mailto:sydneymetrowest@transport.nsw.gov.au)

**Sydney Metro West**

PO Box K659, Haymarket NSW 1240



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