



Rosie, the first roadheader at Westmead metro station site was named by students at Westmead Public School

Major construction underway at Westmead

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, Pyrmont and Hunter Street in the Sydney CBD.

The Gamuda Australia and Laing O'Rourke Consortium (GLC) is delivering the Western Tunnelling Package. The project involves nine kilometres of twin metro rail tunnels between Westmead and Sydney Olympic Park, excavation for two new metro stations, a stabling and maintenance facility at Clyde and a precast facility at Eastern Creek.

Westmead construction overview

Roadheader excavation of the rail crossover cavern has commenced on the eastern side of the station box. A second road header will arrive at Westmead in late 2023 to excavate the stub tunnels west of the station box. Roadheader excavation will continue 24 hours a day, seven days a week until late 2024.

An acoustic shed and covers are being constructed over the work area. This will reduce noise and dust impacts to the community by enclosing the station excavation and spoil removal areas.

During excavation of the metro station box, an estimated 100,000 tonnes of spoil (excavated material) is being removed and re-purposed across projects within the Sydney metropolitan area. The station box is surrounded by 182 support piles with 2,200 ground anchors and supporting rock bolts being installed within the station box and crossover cavern.

What is a roadheader?

A roadheader is a tunnelling machine that has a boom-mounted rotating cutter specifically designed for its high cutting power in underground environments.

The roadheader is mounted on tracks and has a conveyor system for the removal of excavated material. Roadheaders are often used for road, rail and mining tunnel projects.



Roadheader at Clyde

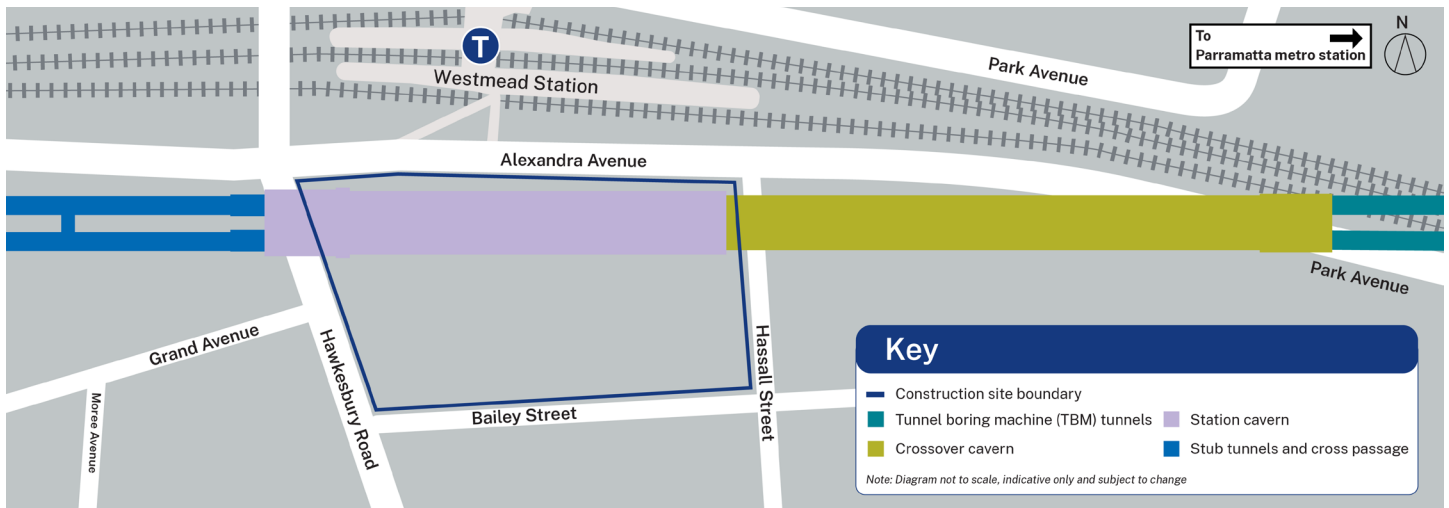
Tunnelling construction activities

Roadheaders are used to excavate the rail crossover caverns and stub tunnels at Westmead metro station.

A rail crossover cavern allows trains to change to the other track while services continue to run within the tunnels. This underground area will also house mechanical ventilation equipment. The rail crossover cavern at Westmead is deep underground and sits between the metro station and twin tunnels. It will be around 240 metres long and 22 metres wide. Most of the cavern will be around 15 metres high.

Stub tunnels will be constructed underground on the western side of the Westmead metro station box. These 90-metre-long tunnels will be excavated to future-proof construction of the metro network.

Pedestrian cross passages will be constructed every 240 metres between the twin metro tunnels, providing safe access between the tunnels in the unlikely event of an emergency.



Map showing Westmead site

Indicative construction timeline

		We are here		
2021 to 2022	Mid 2022 to early 2023	Early 2023 to late 2024	Mid 2024 to mid 2025	Late 2025
Site investigations and demolition	Site establishment	Station box, crossover cavern and stub tunnel excavation	Construction of twin TBM tunnels	Site handover for station construction

Six-month look ahead and out-of-hours work activities

Activity	Noise impact	October 2023	November 2023	December 2023	January 2024	February 2024	March 2024
Construction of acoustic shed	Low to medium	●					
Removal of excavated material	Low to medium	●	●	●	●	●	●
Delivery of machinery, materials and equipment	Low to medium	● ●	● ●	● ●	● ●	● ●	● ●
Excavation of rail crossover cavern	Low to medium	●	●	●	●	●	●
Excavation of stub tunnels	Low to medium	●	●	●	●	●	●
Concrete deliveries	Low to medium	●	●	●	●	●	●
Utility investigations	Medium to high	●	●	●	●	●	●

● Standard construction hours ● 24 hour work activities ● Up to 10 nights per month

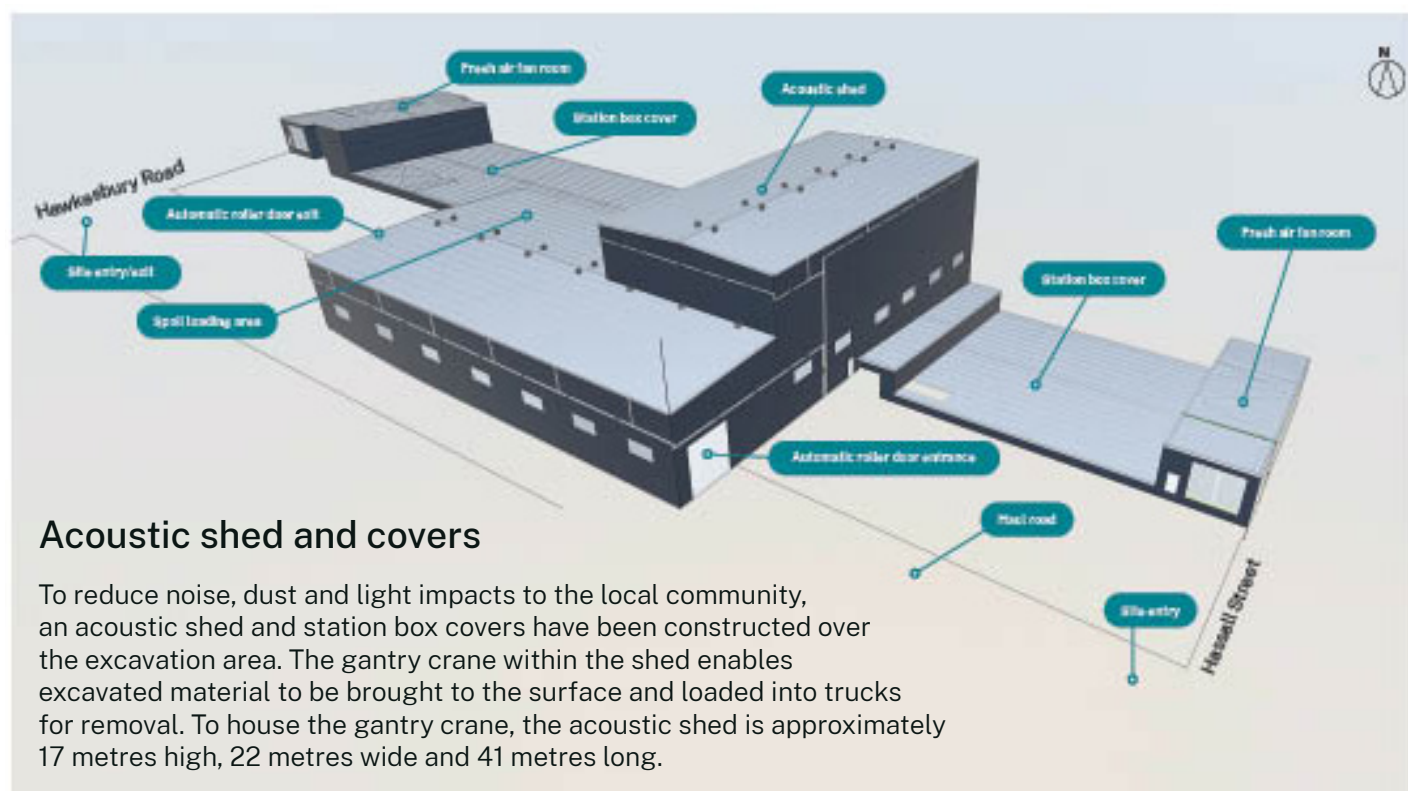
Out-of-hours work

Occasionally, activities such as utility investigations, delivery of oversized plant and machinery or work on roads around site must be carried out at night for the safety of workers, motorists and pedestrians.

Depending on the type of work and expected impacts, a range of mitigation measures may be used such as completing the noisiest work before midnight, installing noise blankets around the worksite, implementing respite periods or providing alternative accommodation.

The project team will provide regular communications and liaise with directly affected residents to provide more information and discuss mitigation options before the work.

If you have an enquiry or would like to provide feedback about the work, including appropriate respite periods, please contact our community team using the details provided below.



Acoustic shed and covers

To reduce noise, dust and light impacts to the local community, an acoustic shed and station box covers have been constructed over the excavation area. The gantry crane within the shed enables excavated material to be brought to the surface and loaded into trucks for removal. To house the gantry crane, the acoustic shed is approximately 17 metres high, 22 metres wide and 41 metres long.

Plant a tree day

The GLC team has been regularly engaging with Westmead Public School and in August joined the students for a sustainability led initiative to celebrate plant a tree day.

Twelve students from Grade 3 and 4 joined the GLC team to plant 20 native trees and a new veggie patch featuring 18 types of herbs. The students also met the people they see daily in “hi-vis” working on the Westmead metro station site across the road from their school.

The students will look after these new plants in the future and learn how plants grow.



Planting new garden beds at Westmead Primary School

Construction hours

Work at the Westmead metro station site involves:

- Standard construction hours – Monday to Friday 7am to 6pm and Saturday 8am to 6pm.
- Excavated material is removed from site only during standard construction hours.
- Tunnelling, cross passage, stub tunnel and cavern excavation is approved to continue 24 hours a day, seven days a week.

Relocating utility services

Sydney Metro has engaged Quickway to relocate underground gas and telecommunications services around the future Westmead metro station site, as part of ongoing construction. This will involve trenching along Hawkesbury Road, Bailey Street and Hassall Street to install new gas pipes and telecommunications cables and reconnecting them into the existing services.

Work will start in the coming weeks and is expected to take about 12 months to complete. It will not be continuous but will be carried out in stages to coordinate with GLC’s site activities. Most of this work will occur at night to comply with road occupancy approvals, minimise disruption to local traffic and ensure the safety of our workers, motorists, and pedestrians.

For any temporary disruptions to utility services such as gas and/or communications you will be notified separately and in advance.

We will keep you informed as planning progresses and provide more detailed information before work begins.



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

metrotunnelsGLC@transport.nsw.gov.au

Sydney Metro West

PO Box K659, Haymarket NSW 1240



Translating and interpreting service

If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 612 173.



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