

MONTHLY CONSTRUCTION UPDATE

KENSINGTON May 2020

Major construction is continuing in Kensington at the site of the future Metro Tunnel western tunnel entrance. This update provides an outline of current and upcoming works in your area throughout May.

Construction snapshot

Tunnel boring machine (TBM) disassembly and retrieval is now complete, with both TBMs now back at the Arden Station site, where they are being reassembled to commence tunnelling from Arden to Parkville.

Works in Kensington are continuing to complete Diaphragm walls (D-walls) and excavation of the tunnel entrance.

In May, works within the Kensington precinct will include:

- Preparatory works for the egress building that will be constructed at the TBM retrieval shaft
- Tunnel cross passage ground improvement site reinstatement works
- Tunnel entrance excavation and base slab construction
- D-wall construction activities
- Capping beam works
- Borehole drilling works
- Permanent propping installation
- Rail corridor works
- Installation of monitoring instrumentation and survey activities.

Further information on these works can be found overleaf or at **metrotunnel.vic.gov.au**

When are we working?



Normal construction hours 7am to 6pm, Monday to Friday

7am to 1pm, Saturdays.



Out of hours

Some works are required to take place out of normal construction hours. The timing of these works are outlined in the construction information overleaf



24 hours

24 hour works are sometimes required during peak construction activities. The timing of these works are outlined in the construction information overleaf.

Health and safety

The health and safety of our workers is our key priority as we continue to deliver the Metro Tunnel Project, as is supporting social distancing measures in line with current health advice. We have strict protocols in place to protect the safety of our construction workforce, including enhanced industrial cleaning arrangements, provision of personal protective equipment and measures to reduce staff contact, including staggered shifts. For more information and advice about the outbreak of Coronavirus, please visit **coronavirus.vic.gov.au**





WORKS IN YOUR AREA

Egress building preparatory works

Childers Street May to July 2020



At the Western Portal, an egress building will be constructed using the TBM retrieval shaft as its foundation and basement. This building will provide emergency access to and from the tunnels, and house emergency equipment and mechanical and electrical systems. The first stage of works involves completing the underground structure of the egress building in preparation for the above ground structure to be built above it later in the year. This involves:

- Using saw cutters and an excavator-mounted jackhammer to demolish the temporary internal dividing wall
- Installing waterproofing membrane to line the underground internal walls
- Installing steel molds (formwork) and reinforcement using a crane and hand tools
- · Pouring concrete to create the internal walls of the underground structure
- Above ground works to construct the building are expected to commence in late 2020. Further information will be provided before these works occur.

Tunnel entrance excavation and base slab construction

Childers Street Ongoing to late-2020



- Tunnel entrance excavation has commenced and will continue throughout 2020 (see map overleaf for location of works)
- Earthworks will continue, including use of excavators to remove material and a vibrating roller placing crushed rock to construct new access ramps and a stable working platform within the tunnel entrance
- Constructing the base slab involves installing drainage pipes and pits, installing waterproofing material, placing steel and pouring concrete
- During steel works, a small excavator will break back excess concrete on the vertical sections of D-walls to connect the base slab steel into the steel of the D-wall panels. Some periods of medium levels of noise are expected during this activity
- During excavation of the tunnel entrance, material will be removed using excavators located at the top of, and within the tunnel entrance. These works are expected to generate low to medium levels of noise
- These works will involve approximately 6 trucks per an hour along Childers Street, Hobsons Road and Kensington Road.

Cross passage construction

From the Arden Station site to Kensington May 2020 to early-2021



Cross passages are short tunnels that connect the twin tunnels and are an important safety feature as they allow people and emergency services to move from one tunnel to the other in the event of an emergency. There will be 26 cross passages located at regular distances along the tunnel alignment.

During May, works to construct the four cross passages between the Arden Station site and western tunnel entrance at Kensington will commence. The first stage of work involves:

- Installing work platforms and steel bracing frames inside the completed section of tunnel
- Geotechnical probe drilling in cross passage locations. This involves drilling through the tunnel wall and collecting samples to confirm ground conditions in each location
- Cutting through the tunnel wall using a wall saw
- Each cross passage is expected to take approximately six months to construct. Works will occur concurrently at different cross passage sites
- These works are not expected to be audible at surface level
- Further information about cross passage construction can be found at metrotunnel.vic.gov.au.

Diaphragm-wall construction

Childers Street and Hobsons Road 7am to 6pm, Monday to Friday 7am to 3:30pm, Saturdays 4 May to mid-June 2020



- Works in early-May will continue to build concrete guide walls. These works involve excavating two trenches, installing reinforcement steel and pouring concrete
- D-walls will be constructed opposite the South Kensington station platforms (see map overleaf for location of works)
- D-wall works will take place mostly during normal construction hours. There may be times where works extend beyond these hours to complete a concrete pour or to ensure the site is left safely at the end of a shift
- More information on D-wall works can be found at metrotunnel.vic.gov.au/construction/ kensington.

Capping beam works

Childers Street Ongoing to July 2020



- There will be ongoing steel and concreting works in May to complete capping beams
- These works are expected to generate low levels of noise to nearby residents

- Once the final D-walls are complete in June, works will continue to break back (level off) D-walls and remove guide walls using a jackhammer, saw cutter and excavator. A capping beam will then be installed to tie D-wall panels together
- Break back works are expected to generate periods of high-level noise.

Rail corridor maintenance works

Childers Street

12am to 4am Tuesday 19 and Wednesday 20 May 12am to 4am, Mondays and Thursdays ongoing to late-2020

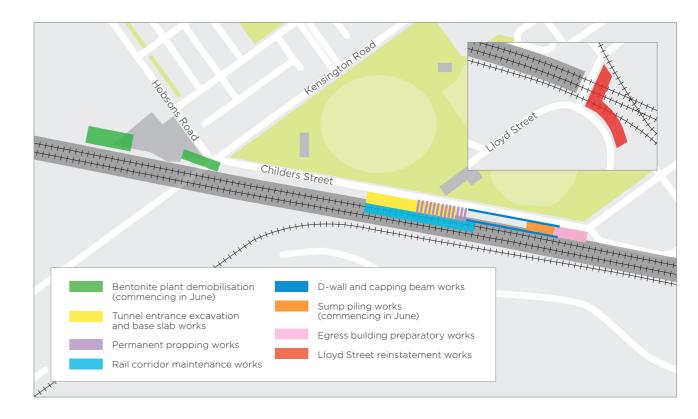
- While excavation activities occur, occasional overnight works may be required within the rail corridor to undertake track maintenance works to ensure trains can continue to operate safely on the network. This activity has been revised to continue to late-2020 while excavation takes place adjacent to the rail corridor
- Works will involve readjusting sleepers, crushed rock and tracks with hand tools and if required a small excavator
- Works may be required for up to four nights per month, however it is unlikely that all Monday and Thursday shifts will be required
- Maintenance works may generate low to medium levels of noise.

Borehole drilling works

Childers Street Ongoing to 9 May 2020



- Borehole drilling works have progressed guicker than expected on site. These works are now expected to be complete by the first week of May
- These works will generate medium levels of noise.



Permanent propping installation

Childers Street Ongoing to September 2020



- · Construction of the tunnel entrance involves installing 30 supporting props which provide horizontal support to the two tunnel entrance walls. The props are concrete structures which are reinforced with steel and connect to the capping beams on each D-wall
- 9 of the 30 props are constructed offsite and will be delivered to site between 5 and 8 May 2020. As the props are delivered, they will be reversed into Childers Street and a large crane will be used to lift each prop into place
- The delivery of props and mobilisation of the crane will occur during normal construction hours in early-May
- The remaining 21 props will be constructed onsite, which will involve placing steel, installing temporary timber moulds and concrete pours. This activity is planned to commence in mid-2020
- Propping works are expected to generate low levels of noise associated with steel works, concrete pours and while the crane is lifting props into place.

Tunnel cross passage reinstatement works Llovd Street Ongoing until May 2020

- Overnight closures of Lloyd Street will be required for up to two weeks in May
- Access to and from the Lloyd Street Business Estate will be maintained at all times
- Further notification will be provided once closure dates are confirmed.

LOOK AHEAD FOR 2020

	May	June	July	August
Tunnel cross passage reinstatement works	••••••			
Egress building preparatory works			••••••	
Cross passage construction – Arden to Kensington	o			
Tunnel entrance excavation and base slab construction		• • • • • • • • • • • • • • • • • • • •		
Sump piling works (see below)		0		•••••
Diaphragm-wall construction		••••••		
Bentonite plant and Kensington Road Gantry Demobilisation		0	••••••	
Capping beam works		• • • • • • • • • • • • • • • • • • • •	••••••	
Permanent propping works				
Tunnel entrance roof slab construction			0	
Drainage works			0	
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Traffic and transport impacts

Childers Street

- Childers Street is currently closed to all traffic
- Over-height vehicles accessing the Lloyd Street Business Estate and Childers Street residents are required to detour via Kensington Road, Derby Street and Tennyson Street during this time
- Traffic controllers are in place on Kensington Road and Childers Street to assist trucks reversing into site
- Traffic management will be in place during construction activities.

Sump piling works

A sump is a low space located beneath the tunnel entrance ground slab which will collect runoff water from the tunnel entrance and pump it back into an improved drainage network along Childers Street.

To construct the sump, piling works will commence in late June to install foundations for a sump box so that a pump system can be installed in late-2020.

This involves using a piling rig with an auger to drill holes, placing concrete cages into the holes and then filling them with concrete to complete the foundation. There are approximately 45 piles which will be installed. This activity is expected the generate periods of high-level noise while the piling rig operates during normal construction hours.

More information

To find out more about the Metro Tunnel Project:

w metrotunnel.vic.gov.au

🜜 1800 105 105 (24 hours a day, 7 days a week)

Rail Projects Victoria PO Box 4509, Melbourne, VIC 3001

1 Interpreter Service **(03) 9209 0147**

It should be noted that this information is current at the time of printing, however due to unforeseen circumstances, changes may occur. Please visit **railprojects.vic.gov.au** for the latest updates.