MONTHLY CONSTRUCTION UPDATE

KENSINGTON
SEPTEMBER 2019

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

Construction snapshot
The launch process for the project’s first tunnel boring machine (TBM) has commenced at the site of the new North Melbourne Station. Over the coming months, it will tunnel towards the retrieval shaft adjacent to South Kensington station.

Works in September will focus on constructing the TBM retrieval shaft and getting ready for a major rail construction blitz commencing at the end of September. The rail work blitz will see an unprecedented amount of activity completed along the Sunbury Line including major works in Kensington to prepare for the realignment of the Sunbury tracks into the new western tunnel entrance.

In September, works within the Kensington precinct will include:
• Rail corridor works
• TBM retrieval shaft construction
• Diaphragm-wall (D-wall) construction
• Bentonite plant operation
• Underground signalling relocation works
• Embankment stabilising works
• High voltage (HV) tower site investigations and removal
• D-wall break back and capping beam works
• Tunnel cross passage ground improvement works
• Installation of monitoring instrumentation and survey activities
• Delivery of rail tracks.

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.
WORKS IN YOUR AREA

Rail corridor works
South Kensington station to Maribyrnong River
12am to 5am Sunday 29 September to 5am Saturday 12 October 2019
- Major 24/7 construction works along the rail corridor. Please see overleaf for detail on these works.

TBM retrieval shaft construction
Childers Street
Ongoing until the end of September 2019
- TBM retrieval shaft works using excavators and trucks to remove the excavated material
- Using excavator-mounted jackhammers periodically to break back sections of the tension piles within the shaft as they are exposed. Jackhammers will be used during the day only
- Spraying concrete (shotcrete) to line the walls of the shaft
- Installing steel supports (struts) inside the retrieval shaft to provide the structural frame for further excavation. Strutting will involve the use of trucks to transport the struts to site and a crane to lift them into place. Struts will then be removed as excavation progresses
- Constructing a concrete base slab at the bottom of the excavated shaft
- Use of light towers will be required during evening and night works. Light towers will be positioned to face away from residential properties, where possible
- All night work activities are expected to generate low levels of noise.

Tunnelling
From North Melbourne towards Kensington
From late August 2019
- The project’s first TBM will begin tunnelling from the site of the new North Melbourne Station towards Kensington
- The second TBM will commence tunnelling a short time after, also from the site of the new North Melbourne Station towards Kensington
- On average, the TBMs will move around 10 metres every 24 hours
- Properties located near tunnelling will be contacted with further information prior to tunnelling commencing in their area
- Property condition surveys have been offered to property owners based on an environmental assessment.

Monitoring equipment maintenance
Lloyd Street, Kensington
8pm Wednesday 4 September to 9am Thursday 5 September 2019
- Work to check and clean monitoring equipment beneath the Lloyd Street rail bridge will be undertaken at night to reduce impacts to Lloyd Street
- This work involves a small crew using hand tools and directional lighting
- This work is expected to generate low levels of noise
- Lloyd Street will be closed in both directions between Radcliffe Street and Bakehouse Road during these works. Access to the Lloyd Street Business Estate will be maintained via both Arden and Childers streets.

Diaphragm-wall construction
Childers Street (adjacent to Bill Vanina Pavilion)
Stage 1: 7am to 8pm, Monday to Saturday, ongoing until late September 2019
Stage 2: 7am to 6am, Ongoing until late September 2019, and 7am to 10pm, October to late 2019
- Diaphragm-walls (D-walls) will be constructed in two stages. Stage 1 is located within the Childers Street worksite, adjacent to the cricket nets and Bill Vanina Pavilion in JJ Holland Park. Stage 2 is located opposite South Kensington station platforms (see map overleaf for location of works).

Stage 1:
- Construction of two D-walls involving cranes excavating individual panels, installing steel reinforcement cages and concrete
- Deliveries of steel cages will require short holds of traffic on Kensington Road while trucks reverse into the Childers Street work site
- Concrete trucks accessing the Childers Street worksite to pour concrete for the D-wall panels
- These works are expected to generate low levels of noise to nearby residents and low levels of vibration are expected while excavation of rock and firmer soils takes place.

Stage 2 (D-wall preparation works):
- Guide walls will be installed prior to installing D-walls adjacent to South Kensington station platforms
- These works involve excavating two trenches adjacent to the tunnel entrance, installing reinforcement steel and pouring concrete
- These works are expected to generate low to medium levels of noise.

D-wall break back and capping beam works
(Stage 1)
Childers Street
Late September to late 2019
- Once sections of Stage 1 D-walls are complete, works will commence to break back D-walls, remove guide walls and install capping beams
- D-walls and guide walls will be ‘broken back’ (levelled off) using a jackhammer, saw cutter and excavator, and a capping beam will be installed to tie D-wall panels together
- These works will be undertaken in stages, with break back activities expected to be undertaken in approximately three-week blocks once sections of D-walls are installed
- These works are expected to generate high-level noise.

Bentonite plant operation
Hobsons Road to Maribyrnong River
7am to 1pm, Monday to Saturday, ongoing until late 2019
- Operation of the bentonite plant (located within the Hobsons Road site compound) while D-wall works take place
- The bentonite plant includes pumps, generators, piles and a de-sanding machine to recycle bentonite
- Low to medium levels of noise are expected from the use of bentonite plant pumps, however, it is not expected to be disruptive.

Underground signalling relocation works
Kensington Road
7am to 6pm, Monday to Friday, ongoing until late-September
7am to 6pm, Saturday 14 to Sunday 15 September 2019
- Relocating train signaling cables underneath Kensington Road and underneath the V/line rail corridor
- This will involve the use of an excavator digging a small trench, a crane lifting in concrete cases, and a small drilling machine installing new pipes underneath the rail corridor
- Two-way traffic will be maintained during these works, with sections of the road closed to allow works to take place safely
- These works are expected to generate periods of high-level noise while the drilling machine is used
- Works may extend past 6pm on Saturday 7 September, and Saturday 14 September to minimise disruption to local businesses operating during the day.

Embankment stabilising works
Childers Street
Ongoing to late-September 2019
- Ongoing steel installation and concreting works will be undertaken to stabilise the rail corridor embankment in this area
- These works will involve installing and welding reinforcement steel and pouring a concrete base
- Earthworks including excavation of materials, placement of new materials and use of a vibrating roller will be undertaken
- These works are expected to generate medium level noise and medium to high levels of vibration associated with the use of the vibrating roller.

HV tower site investigations and underground infrastructure removal
Childers Street
Monday 9 September to October 2019
- Work is required to identify the location of existing concrete piles from HV towers which were relocated in 2018
- This will involve the use of a non-destructive digging (NDD) truck to identify the locations of piles
- Once the concrete piles are identified, piles will require removal to allow for D-wall construction to commence in this area. These works will occur in the D-wall stage 2 area
- It is expected that pile removal works will generate high levels of noise, and anticipated to take up to three weeks to remove
- Further information will be provided to the community prior to any pile removal activities.

Tunnel cross passage ground improvement works
Lloyd Street and McLennan Drive
24/7, ongoing until late 2019
- Cross passage ground improvement works on Lloyd Street and McLennan Drive will continue. This work is not expected to be audible from residential properties.

Tunnel cross passage ground improvement works
Lloyd Street and McLennan Drive
24/7, ongoing until late 2019
- Cross passage ground improvement works on Lloyd Street and McLennan Drive will continue. This work is not expected to be audible from residential properties.
**24/7 RAIL CORRIDOR WORKS UPDATE**

**KENSINGTON**

**SATURDAY 28 SEPTEMBER TO SATURDAY 12 OCTOBER 2019**

From 12:01am, Sunday 29 September to Saturday 12 October, 24/7 works will take place in Kensington as part of construction of the western tunnel entrance. These works will take place along the Sunbury rail line between South Kensington station and Tottenham stations.

**Construction snapshot**

- Removing and replacing existing train signals, cabling, overhead wiring, track and crushed rock from within the rail corridor
- Installation new drainage along the rail corridor
- Installation of guide walls prior to the installation of D-walls
- 24/7 installation of D-walls
- Additional work will also be completed within the Sunbury rail line. For further information about these works, please visit metrotunnel.vic.gov.au/construction/sunbury.

**Traffic changes**

**Hobsons Road temporary car park full closure**

- A full closure of the temporary public car park located on the corner of Kensington Road and Hobsons Road is required
- The closure of the car park is required to construct large sections of new rail and materials to be transported into the rail corridor
- Car park users are advised to find alternative locations to park during this time.

**Hobsons Road lane closure**

- Hobsons Road will be reduced to one traffic lane between Kensington Road and Balmer Street
- On-street parking will be closed, between Kensington Road and Balmer Street
- Traffic controllers will be in place to assist with all vehicle, pedestrian and cyclists movements along Hobsons Road.

**Travel changes**

To ensure the 24-hour works can take place safely, buses will replace trains between Flagstaff and Sunshine stations on the Sunbury line from 11.15pm Saturday 28 September to 9pm Friday 11 October. For further details and to plan your journey, visit ptv.vic.gov.au

**AFL Grand Final, Saturday 28 September**

The project team have carefully planned the timing of these works to ensure impacts to those travelling to the AFL Grand Final day and evening are minimised.

Please note, preparatory works in Kensington will occur throughout Saturday afternoon and night.
LOOK AHEAD FOR 2019

<table>
<thead>
<tr>
<th>Event Description</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-wall construction (Stage 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-wall preparation (Stage 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-wall construction (Stage 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-wall break back and capping beam installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HV Tower pile investigation and removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signalling cable relocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail corridor works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embankment stabilising works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunnel cross passage ground improvement works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBM retrieval shaft construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunnelling – North Melbourne towards Kensington</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

More information
To find out more about the Metro Tunnel Project and register for future email updates:

- 1800 105 105 (24 hours a day, 7 days a week)
- Press 2 and follow the prompts
- [facebook.com/metrotunnel](http://facebook.com/metrotunnel)
- Subscribe to eNews or construction notification emails: metrotunnel.vic.gov.au/subscribe

It should be noted that this information is current at the time of printing, however due to unforeseen circumstances, changes may occur. Please visit [metrotunnel.vic.gov.au](http://metrotunnel.vic.gov.au) for the latest updates.