MONTHLY CONSTRUCTION UPDATE

ARDEN
APRIL 2019

Major construction of the Metro Tunnel is continuing at the Arden Precinct construction site. This update provides an outline of current and upcoming works in your area throughout April.

Construction snapshot
Construction works are continuing within the Arden precinct during April and will include:

• Ongoing site establishment activities
• Night time oversize equipment deliveries to and from site
• Station box excavation, installation of the station box frame (struts) and base slab construction
• Tunnel boring machine (TBM) assembly
• Surveying, and sampling and testing of groundwater and soil
• Concreting of internal haulage roads and installation of rumble grids
• Slurry treatment plant and concrete batching plant construction
• Modifications to wooden hoarding and gates on Laurens and Arden streets
• Short-term lane closures on Laurens Street between Arden and Miller streets to allow for utility connections and gate modifications

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

Some activities may be required to continue slightly past these hours. All efforts will be made to complete activities as scheduled.

24 hours
24 hour works are sometimes required during peak construction activities. These are timed to minimise disruptions to the train, tram and road networks where possible. The timing of these works are outlined in the construction information overleaf.

We are taking a break
Please be advised that the Metro Tunnel Project will take a break from construction over the Easter period. The last day of construction will be Thursday 18 April. Work will recommence on Monday 29 April 2019. During this time, the site will be secured with regular security patrols and we may undertake some minor works to maintain our sites or respond to unforeseen circumstances.
WORKS IN YOUR AREA

TBM assembly
Arden construction site
Until mid-2019
• The second of the four TBMs to dig the Metro Tunnel was delivered to the Arden Precinct construction site during March
• Large cranes will be used to move and connect pieces of the TBM at ground level
• Following base slab construction, the TBM parts will be lifted into the station box so where assembly will be completed.

Station box excavation and base slab construction
Arden construction site
Monday to Saturday, until mid-2019
• Station box excavation, installing steel supports (struts) inside the excavated station box and base slab construction will occur overnight, as well as during the day. The struts will provide the structural frame that supports further excavation of the station box
• Construction vehicles will enter and exit the site via Arden Street after 6pm
• Concrete pouring activities may commence before 7am, Monday to Saturday
• All out of hours works are expected to generate low levels of noise.

Site establishment works and station box excavation
Arden construction site
7am - 6pm, Monday to Saturday until mid-2019
• Ongoing site establishment activities
• Station box excavation, installation of the station box frame (struts) and base slab construction
• TBM assembly
• Surveying, and sampling and testing of groundwater and soil

• Concreting of internal haulage roads and installation of additional rumble grids
• Slurry treatment plant and concrete batching plant construction
• Modification to wooden hoarding and gates on Laurens and Arden streets

Traffic and transport impacts
• Up to 200 trucks per day are expected to travel to and from site during April. Construction vehicles and trucks will access the site via Laurens and Arden streets
• All trucks carrying excavated materials will be covered, and water carts and street sweepers will be used to minimise the spread of dust
• Rumble grids will be installed to remove debris from the wheels of vehicles to minimise the spread of dirt on local roads
• Some short-term single lane, footpath and parking space closures may be required on Laurens Street to facilitate utility connections and gate and hoarding modifications. Signage and traffic controllers will be in place to safely guide vehicles, cyclists and pedestrians around the work area
• Road cleaning on Arden Street may be undertaken at night to reduce disruptions to traffic. Traffic flow will be maintained in both directions during this work.
Terms explained

Rumble grids
Rumble grids are metal surfaces installed into site exits that remove dirt, mud and debris from tyres and the underside of vehicles.

Base slab
Once each section of the station box has been fully excavated, we need to construct a base slab. This involves:
- Pouring an initial layer of concrete to create a strong, flat surface
- Installing a waterproof coating over the concrete to prevent groundwater seeping into the station box
- Pouring a final thick layer of concrete to complete the station box base.

Once the base slab is complete, pieces of the TBM will be lowered into the station box for assembly. Once tunnelling is complete, the base slab will become the base of the future North Melbourne Station.

Asbestos removal
It is not unusual or unexpected for asbestos to be present in demolished industrial sites, as it was commonly used in construction material until the 1980s. Asbestos has been identified at this site and we anticipate that more asbestos will be found as works progress. Removal of asbestos will be undertaken by qualified personnel, in accordance with WorkSafe Victoria’s Compliance Code 2008 for Removing Asbestos in Workplaces. Removal of asbestos containing materials by licensed removalists does not pose any safety risk to site staff or the public.

LOOK AHEAD FOR 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slurry treatment plant and concrete batch plant construction</td>
<td>⬤</td>
<td></td>
<td>⬤</td>
<td>⬤</td>
</tr>
<tr>
<td>Station box excavation and strutting</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
</tr>
<tr>
<td>Station base slab construction</td>
<td>⬤</td>
<td></td>
<td></td>
<td>⬤</td>
</tr>
<tr>
<td>Hoarding &amp; gate modifications</td>
<td>⬤</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
</tr>
<tr>
<td>TBM assembly</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.