More than 10,000m of track installed

More than one-third of the light rail track is now in the ground, with over 10,000m of single track now in place across the alignment. This is a significant achievement and the result of months of hard work. The installation of track signifies the end of complex, underground utility works and groundwork. While there is still a lot of work to do on either side of the tracks – including installation of smart poles, street furniture and tree planting – track installation is a significant sign of progress across the project.

With track in place in many zones, we are now moving into a new phase of work in some areas, including the completion of substations, and installation of paving, poles, underground cables and overhead wires.

Alison Road and Anzac Parade will be the first sections to see the testing and commissioning of light rail systems and vehicles in the coming months. See inside for more information about the testing and commissioning process.

Our new light rail vehicle unveiled

Our first light rail vehicle was unveiled at the Randwick Stabling Yard in early August, marking an exciting stage in the project.

Sydney is the first city in the world to receive the new Citadis X05 vehicles. While more than 50 cities worldwide use the trusted Citadis vehicles manufactured by Alstom, Sydney will be the first city to enjoy the newest model with all the latest features.

Each vehicle is fully accessible with low floors, double doors, dedicated areas for wheelchairs and on-board passenger emergency intercoms.

The vehicle travelled by road from Alstom’s Centre of Excellence in La Rochelle, France to Santander in Spain, where it was loaded onto a ship for the long journey to Port Kembla. The vehicle was then transported overnight by truck to its new home in Randwick.

NSW Premier Gladys Berejiklian and Minister for Transport and Infrastructure Andrew Constance were on hand to reveal the new light rail vehicles.

The world-first glimpse of the new vehicle for the CBD and South East Light Rail is a significant step towards the new transport system coming to life.
Plenty of energy for light rail testing

We are now preparing to enter a new and exciting phase – testing of light rail vehicles and systems. To ensure the light rail network will be ready and safe for operations in 2019, extensive testing needs to be carried out.

Testing and commissioning will start later this year, first around Moore Park and Randwick, near the Randwick Stabling Yard where the light rail vehicles will be housed.

Powering-up

Part of the major civil work currently underway includes the construction of the substations that will power the light rail system.

New substations are already in place in the Randwick Stabling Yard and on Wansey Road.

The substations are fitted out with the electrical equipment that will power the light rail.

The next step is to install and power up the overhead wires along the alignment. In the CBD, between Circular Quay and Bathurst Street, the light rail will be powered by an in ground third rail which will be tested later.

The introduction of live overhead wires along the light rail alignment will be a new feature for some of our Sydney streets. It will be followed several weeks later by the introduction of moving light rail vehicles.

This is an exciting stage but also one with new safety awareness requirements. We will be communicating with the community as we install wires and begin testing along each part of the alignment.

Each step of the testing and commissioning process will bring with it a new environment for the community as we move towards a fully operational light rail system.

A three-stage process

In delivering the new light rail system, public safety is always our first priority.

The main aspects of testing and commissioning the light rail system that will impact the public include the installation and energisation of overhead wires, followed by the testing of light rail vehicles on the track.

There are three stages in preparation for light rail testing:

1. Installation of overhead wires
2. Energisation of overhead wires
3. Light rail vehicle testing

"Each step of the testing and commissioning process will bring with it a new environment for the community as we move towards a fully operational light rail system."

What is testing and commissioning?

Before we can operate a new light rail system to a timetable and with passengers on board, we need to ensure that the system is fully functional and safe for public use.

This process takes many months prior to the operation of the first light rail service.

Testing of the light rail vehicles will initially be carried out at low speeds, gradually increasing as testing of critical functions, such as emergency brakes and signalling, are complete.

When all functions of the light rail vehicle have been tested, driver training will commence, more vehicles will be tested with more frequent movements. All light rail vehicles will be individually tested.

As we get closer to operation, drivers will be trained to operate the entire fleet, and service frequency and timetabling will be tested and validated.

For more information: sydneylightrail.com.au
STAGE 1: Installation of overhead wires

Once all poles are installed, a specialised crew will begin installing cantilevers, cross spans and supports to each pole that will support the wires along the alignment.

The crew will then pull lengths of the overhead wire and attach it from pole to pole before performing final adjustments and testing.

The first of the poles that will support the overhead wiring are already in place along Alison Road and the Stabling Yard, in preparation for overhead wires to be installed.

STAY SAFE!
Look out for new poles and overhead wires in your area.

STAGE 2: Energisation of overhead wires

When the overhead wires are in place and testing is complete in a section of the alignment, they will be energised. This will happen in several stages across the alignment, starting in Moore Park and Randwick.

New signs will be installed along live sections, warning that the area is now energised. Contact with live wires must be avoided at all times.

STAY SAFE!
Look up and always keep a clear distance from live wires.

STAGE 3: Light rail vehicle testing

When final safety checks are complete on the light rail systems, vehicle testing will begin.

The first movements will be within the Randwick Stabling Yard, and along Alison Road and Anzac Parade. Vehicle testing will initially be carried out at low speed, gradually increasing as tests are verified. This is the first time that the new light rail system will operate alongside motorists, buses, pedestrians and cyclists. New signage and traffic signals will be in place and we’ll be providing more information to the community about safety around the new light rail vehicles.

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Hazard zones

The testing and commissioning period presents new safety risks to tradespeople, residents or business owners working near the light rail alignment. A new hazard zone will need to be established along the alignment around the track, poles and overhead wires.

Anyone wanting to work within these hazard zones will need to be aware of safety requirements.

We’ll be providing more information to the community about safety around hazard zones before energisation takes place.

STAY SAFE!
As construction fencing and hoarding is gradually removed, watch out for light rail vehicles, follow signage and obey traffic signals.

STAY SAFE!
Be aware of safety requirements if you need to work in a hazard zone.

For more information: sydneylightrail.com.au
King Street intersection work success

The team worked at a fast pace to install track at the intersection of George Street and King Street in the CBD during only one full weekend traffic closure.

A critical CBD intersection, it was important to minimise the disruption to King Street traffic during construction.

By working within partial lane closures in the preliminary stages, and completing all track work over one weekend, only one full closure of the intersection was required to complete this important work.

Not all work can be completed in this timeframe in other CBD intersections, due in part to the extent of utility and other work to prepare them for light rail tracks.

For example, at the intersection of George and Market Streets, we are building the light rail tracks over the arcade which runs under the roadway between the QVB and the Westfield building. The complexity of this work will require a program of around six full weekend closures starting in January 2018.

On Anzac Parade, track has already been installed in almost of all of our light rail intersections, with only the Anzac Parade and Alison Road intersection, and the Nine Ways intersection remaining. In Randwick, the light rail crossing over Alison Road near Darley Road is also complete. For all the latest traffic information, visit livetraffic.com

Breakthrough at the Moore Park Tunnel

An important milestone was reached in Moore Park during August, with the breakthrough of the tunnel connecting Surry Hills to the Moore Park sporting and entertainment precinct.

Constructing the tunnel has been a huge engineering feat, using a cut-and-cover method under the Moore Park playing fields and a top-down technique underneath Anzac Parade, which allowed us to minimise impact to road users and keep traffic moving above.

The tunnel breakthrough brings us another step closer to seeing the light rail emerge from the tunnel to the future Moore Park stop, which will make it easier for Sydneysiders to access the Sydney Football Stadium, Sydney Cricket Ground and the Moore Park precinct.

The construction team can now finish the tunnel structure underneath Anzac Parade, construct the tunnel portal near the Moore Park stop and install the tracks.

“The tunnel breakthrough brings us another step closer to seeing the light rail emerge from the tunnel to the future Moore Park stop.”

Contact details

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