

CENTRAL INTERCEPTOR BULLETIN

Pump Station 25 site (PS25), 32B Miranda Street, Avondale

We're building the Central Interceptor, a super-sized wastewater tunnel to reduce overflows, creating a better environment for you to enjoy.

Site update

We have been very busy at our Pump Station 25 site (PS25).

In March we celebrated a significant milestone for the project when the tunnelling of Link Sewer C was completed. Our micro tunnel boring machine (mTBM) Domenica broke through into the shaft at PS25, completing tunnelling for the section.



After the breakthrough, Domenica was removed from the ground, serviced and returned to the ground at Mount Albert in July to tunnel her way to Norgrove on Link Sewer B.

Now the tunnelling is complete, the team has been busy on site constructing the concrete walls of the shaft as well as continuing to work on the two chambers. Due to the size of the shaft, we have large sections of wall to build. Large sections mean a lot of concrete so please take care when walking near our site.

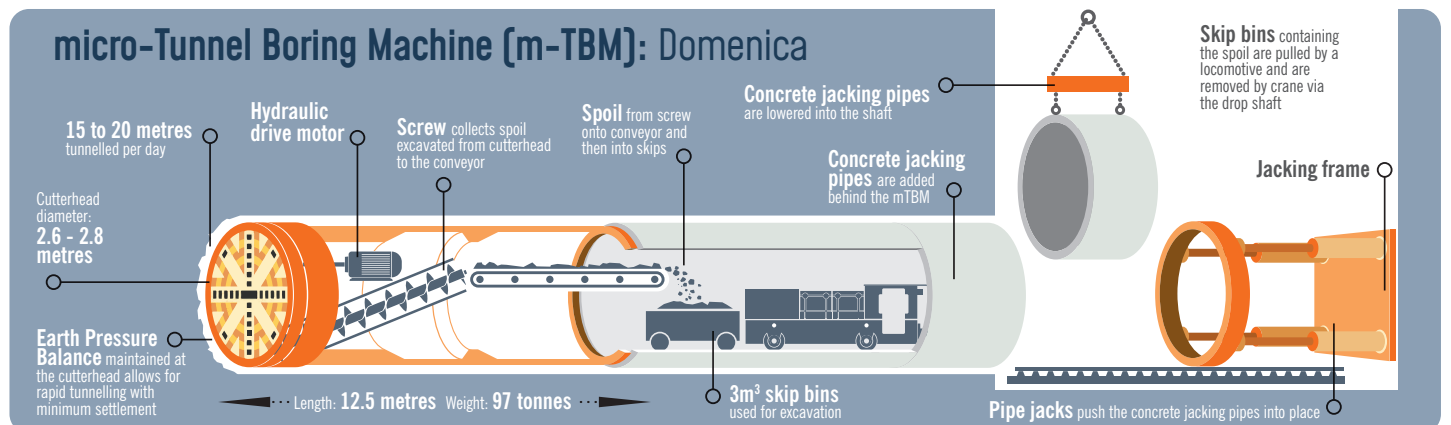
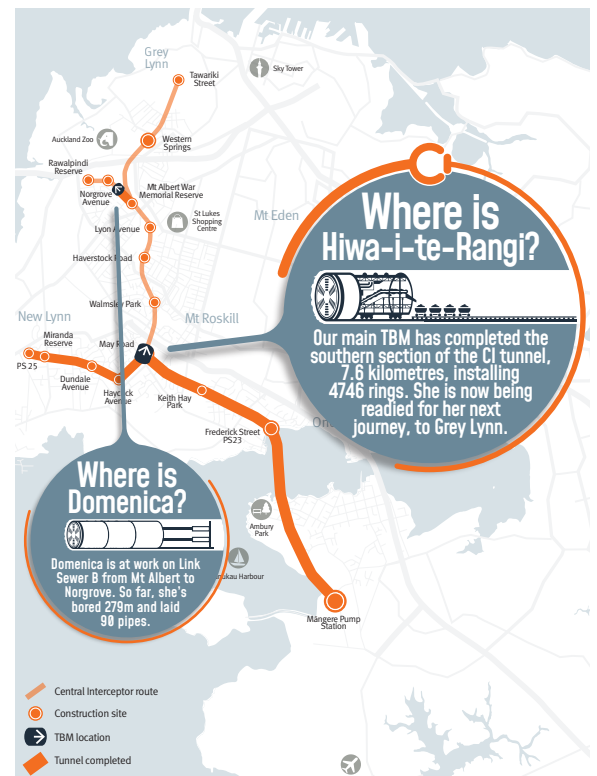
What is next?

We'll be a hive of activity this summer. We are just completing excavation and construction of our two remaining chambers. We are continuing our work on the concrete walls in the shaft which need to be poured in sections, with each section set before the next one can be poured on top. We are also busy with pipe-jacking and making all the pipe connections.

Tunnel progress

Check out our website which now has a weekly update of the TBM's progress. <https://www.watercare.co.nz/Central-interceptor/Constructing-the-Central-Interceptor>.

You can also follow us on Facebook, or Instagram.





Electric trucks

As our team excavates the shaft, you may notice an increase in the number of trucks going in and out of the construction site. We produce a large amount of spoil during excavation and this needs to be transported offsite. Spoil is material (such as rock or earth) that is removed when excavating. Our traffic management team is onsite to ensure the safety of pedestrians and other vehicles. Please follow all instructions and signage to keep you and our workers safe. Some of this spoil will be removed in one of our electric trucks



The trucks have a 13-tonne load-carrying capacity and weigh 26,000kg when fully loaded. They will transport more than 66,000 tonnes of spoil from Central Interceptor sites throughout the project. This will reduce project emissions by more than 300 tonnes in total. This is the equivalent of driving from Cape Reinga to Bluff more than 800 times.

E-trucks produce 79% less carbon than diesel trucks. For every 100,000km travelled by our trucks will save 50,000 litres of diesel. Not only are E-trucks more efficient but they are also much quieter than diesel trucks. This is a huge bonus as many of our sites are in residential areas.

Any questions?

For up to date information please see our website:

 www.centralinterceptor.co.nz

You can also email us at:

 ciproject@gajv.com

Or phone:

 **0800 GAJV 02 (0800425802)**

Follow us:

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Who it takes to build the Central Interceptor

The Central Interceptor project stretches across 16 sites from Māngere to Grey Lynn. Each of these sites has a team of people working on various activities and construction stages. There are numerous jobs on this project, each requiring different skills, backgrounds, experience and qualifications. This regular feature will give some insight into one of the many important roles on the project.

Micro Tunnel Boring Machine (mTBM) Operator

What is an mTBM operator?

They are the pilot/driver of the mTBM. We have two experienced mTBM operators working on the Central Interceptor project.

What qualifications do you need to be an mTBM operator?

There is no formal qualification required to become an mTBM operator. For our project, the requirement is first-hand mTBM experience for two or more years.

What are some of the daily activities for an mTBM operator?

An mTBM operator will start their day with the site team completing a pre-start. Pre-starts are where the team gets together to discuss the work for the day, safety requirements and other important information. They then travel through the tunnel via electric locomotive to reach the mTBM to begin driving the machine. Their job is to drive the mTBM, operate it correctly and efficiently and inspect the mTBM to ensure everything runs as smoothly as possible.

What are the challenges of being an mTBM operator?

There are unique challenges for those working underground, especially when it comes to tunneling. The space is confined and there is no natural light or air ventilation. There are risks of exposure to air contaminants, fire and floods. Our mTBM operators are skilled and experienced, having been trained to know what to do if an emergency occurs.



One of the biggest challenges for our mTBM operators is driving and steering the mTBM completely “blind”. The operators use a gyro navigation system to guide the mTBM through the earth. The gyro system is a device that uses gravity to determine the orientation of the machine and reports directional information back to the operator. The mines survey team (part of the tunnel crew) carries out periodic surveys every 40-80 metres to ensure that the mTBM is moving in the right direction.

Despite the challenge that is driving blind underground, our operators have achieved four breakthroughs into our receiving shafts on Link sewer C with incredible accuracy.



We encourage you to receive these updates electronically - send us your email, your current mailing address and quote "Sign me up: PS25 site bulletin" to ciproject@water.co.nz