



John 'Jeck' Mallari, high in position at May Road. Jeck is shown working as a dogman on the safe rigging of the load and directing of the lifting and placing operations of one of our excavators. Jeck is a leading hand on site and will soon complete his B grade Tunnel Managers Certificate.

## Going underground!

Ghella Abergeldie, our project contractor, is showing no sign of slowing down. While last year was all about setting up on site, the Central Interceptor has now moved into another level of activity and buzz with our teams now starting to dig deep.

This year has been a busy start with major milestones being construction of the shaft walls at our two main sites, Māngere Pump Station and May Road. This work prepared the sites for our teams to start excavating the shafts. The shafts at Māngere are huge: the two interconnected shafts are 12m and 26m in diameter and will go down 40 metres.

At May Road, we are excavating a shaft to connect a new tunnel, link sewer C, to the main tunnel. This sewer line will carry flows from the existing Western Interceptor tunnel into the main Central Interceptor tunnel at May Road.

The tunnel for the sewer will be dug by a 2.4m diameter 'micro' tunnel boring machine (mTBM) which will be launched 55m below ground level at May Road. From there, it will go to our Haycock Avenue site and be relaunched from several other sites to finally end at our pump station in Miranda Reserve, in New Windsor.

Both Māngere and May Road have now been declared mine sites with the start of excavation work. We now comply with the Mining Operations and Quarrying Operations regulations, which place tighter controls and limit access to the shaft. We hold a special two-day training course for staff working in a mine site.

With COVID-19, focus around the world is more than ever on health, safety and wellbeing. At CI, we integrate these into all we do and they remain our number one project priority. Our focus on health, safety and wellbeing is why we have set up an innovative training and induction centre at Māngere. (We have articles on our training centre team and our nurses on the back page.)

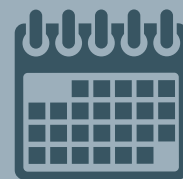
### Focus shifts to delivery of tunnel boring machines

A key part of our programme at the centre includes tunnelling training. To help, we have imported a full-sized tunnel boring machine (TBM) to practice on. Because TBMs are traditionally given a female name, we've taken this opportunity to honour a pioneering woman of New Zealand education. See more on this story inside.

Our project tunnel boring machine (TBM) is about to be loaded on the ship for her journey from Germany. This 5.4 diameter machine is one impressive piece of equipment, and we'll be covering its arrival at Māngere in our next issue.

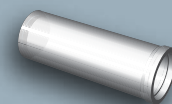
### In this issue:

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- Honouring a woman pioneer of NZ education
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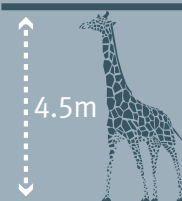


Project build  
2019  
to  
2025

14.7 kilometres

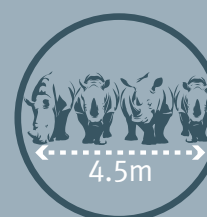


longest  
wastewater  
tunnel in  
NZ



4.5m

high  
enough  
to fit a  
giraffe



4.5m

wide  
enough  
to fit four  
rhino side  
by side

# More construction sites ready to start

When we started the year, we had commenced work at two sites at Māngere Pump Station and May Road. Since then, three more sites have begun construction activities, at Keith Hay Park, Haycock Avenue and Dundale Avenue.

The next emphasis for the project is to start constructing underground chambers and links into existing local wastewater networks. To do so, our Miranda Reserve, New Windsor, site will open at the end of September. As with Dundale Avenue, the shaft at this site will be used to lower a second TBM, 2.4m in diameter, down to where it will bore the sewer link tunnel. In addition, at Keith Hay Park, you may notice extra work locations pushed out from our main site.

The other site to begin this year is at Walmsley Park in Mt Roskill. We will begin set up in October: this site was delayed due to disruptions to our equipment deliveries because of COVID-19.

Before we begin work at our new sites we'll send more details to local residents, businesses and community groups via our project bulletins. We'll also invite you to our 'Meet the Contractor' events at site to find out more about the activities we plan (and to enjoy a sausage sizzle with us too).

We encourage you to sign up to our site bulletins so you know what's happening throughout the project – go to [www.centralinterceptor.co.nz](http://www.centralinterceptor.co.nz) to sign up.



# Training centre passes notable milestone



Two recent new starters learning best practice for working at height.

Our purpose-designed training and induction centre recently celebrated an important landmark in its number of 'graduates'. The centre, with its state-of-the-art learning facilities, hosts our two-day project induction programme every week. To date, some 1000 Watercare, GAV and contractor staff members have been inducted.

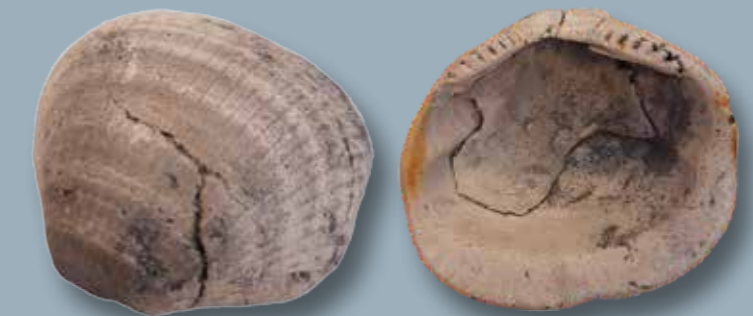
In the programme, alongside practical construction safety advice, there are several topics you might not expect: advice on a mental health initiative called 'Mates in Construction'; a cultural induction from our mana whenua partners; how sustainability is built into every aspect of CI; and even a session on how we work with archaeologists on the project. The centre's programme has attracted the attention of Worksafe New Zealand, which have been interested to see the holistic approach to training and induction that the centre takes.

# A discovery from the distant past

We made an interesting find during our D-Wall excavation at Māngere. The shell pictured is a *Glycymeris (Manaia) kaawaensis* and was found approximately 30 metres below ground.

The shell most likely came from shallow marine and estuarine sediments of the Kaawa Formation. This is a sand-rich rock formation that is one of the most valuable groundwater aquifers of the Auckland Region, particularly across South Auckland.

Our friends at GNS Science gave an estimated age for this specimen: the 30 metre depth and the type of species indicate it could be anywhere from 3-4 million years old and is from the Pliocene Age. The small holes on the outer surface were made from boring by a polydora worm, before the shell was buried.



Three generations of Kate's family with Auckland's Mayor Hon. Phil Goff, Watercare's Board Chair Margaret Devlin and CI executives Shayne Cunis of Watercare and Francesco Saibene of GAV.

# Honouring a woman pioneer of New Zealand education

Kate Edger was the first woman to earn a University degree in New Zealand, a Bachelor of Arts in Mathematics, which was awarded on 11 July 1877. The next year Kate became the founding principal of Nelson College for Girls, where she stayed until 1890. Later, she moved to Wellington and opened a small private school for girls. In the capital, Kate was very active in women's education and social issues of the day, including the female suffrage movement.

To celebrate the training TBM's arrival, more than 100 local elected members, Watercare directors, industry representatives and project staff joined Auckland's Mayor and Watercare directors for a dedication ceremony. It was a beautiful morning on Friday 17 July as you can see from the photos.

Special guests of honour were Trustees of the Kate Edger Educational Charitable Trust and three generations of Kate's family (from grand-daughter to great, great grand-children). The long-standing Trust's purpose is to help further higher education for women with financial help. Watercare and Ghella Abergeldie JV were pleased to donate \$5000 to enable the Trust to provide assistance to a female engineering student in the Auckland area.

Around the world, there is a tradition of giving female names to tunnel boring machines (TBMs). This is often an opportunity to honour a historical woman of note. At CI, we've used the arrival of our full-sized training TBM to do so for a pioneer in education in this country. Alongside the TBM we've erected a plaque so training centre visitors can learn more about the original Kate.



'Kate' in position at Māngere, awaiting painting and branding.

# Meet the team building the Central Interceptor

## Innovative leadership paves the way to success

No programme succeeds unless driven from the top. Lisa Stafford has been the GAJV Training and Development (T&D) Manager, managing an awesome team of five, working with the business to deliver our training and development programme to the project workforce.

Lisa is English and has an economics degree, which she studied as a step towards a career in politics! But things change, as they do, and she went on to complete a Masters in Learning; while this is not exactly a traditional T&D path, along the way she gained experience in a number of different industries. One previous role was as an education advisor at the British Dental Association, so there's not much she doesn't know about fluoride or mouth guards!

Lisa came to our CI project when Site Senior Executive, Matt Mules, sold her the dream! She was particularly attracted by how to leave a legacy for the communities we are working in and the construction industry as a whole: she is determined we will all make a difference.

Lisa has a young family and loves to spend time with them on school and sports activities. Her latest favourite pastime: after a 30 year break she decided to have a go at field athletics again. She now throws the hammer for Glen Eden Senior Athletics team, which she describes as "great fun, with the reward of a 'beverage' in the clubroom afterwards, too."

The Mother of Parliament's loss is our gain!



Lisa, centre, with the T&D team celebrating the 500th induction. When we can all gather together again, we'll have tea and cake to celebrate #1000!

## New staff members bolster health, safety and wellbeing team

We've talked about how health, safety and wellbeing are integral to all we do at CI. As part of our on-going commitment in these areas, two new staff members have joined our team. Amy Semmens and Rachel Rishworth started with us in time to help with the return to work from the first lockdown. Since then, they've both been busy with pre-employment medicals, drug and alcohol testing, along with general wellbeing checks, often joining the early morning toolbox talks on our construction sites.

Amy Semmens has more than seven years' experience as a Registered Nurse, both in New Zealand and abroad, after gaining her Bachelor of Nursing in Christchurch. She followed up this degree with a Postgraduate Certificate in Children's Health in Australia. Amy has worked in various areas of health throughout her career, with an emergency nursing role in the Australian Outback being the most challenging.

After two years as an occupational health nurse in the UK, Amy was exposed to a new sector of nursing. She travelled throughout Britain, completing screening and setting up an occupational health clinic in Glasgow.

This has driven a passion for occupational health and led Amy to progress a career in the occupational health field and so she chose to join CI. She is excited to get involved in the biggest wastewater project this country has undertaken and to use the occupational health knowledge she's gained from the UK.

When Amy's not at the GAJV or out on site, she enjoys taking her fur-baby Ruby, a cocker spaniel, out for walks. She's now hoping COVID won't prevent her from enjoying her favourite pastime: skiing every winter here in New Zealand!



Amy Semmens showing a GAJV construction site engineer the correct fitting of his mask.

Health and Wellbeing Advisor, Rachel Rishworth, works closely with the Health, Safety and Wellbeing team to provide expertise in health promotion and implementation of health and wellbeing initiatives.

She too is well-qualified, both as a Registered Nurse with a Bachelor of Nursing Degree from the University of Auckland and a post-graduate paper in Child Health from AUT. Rachel joined CI as a way to expand her occupational health knowledge, in an industrial setting.

Rachel previously worked at Starship Children's Hospital on the Surgical Unit and more recently completed post-graduate studies in Dermoscopy. Her specialisation in the identification of skin cancers took her all over New Zealand to perform skin checks.

Outside of work, Rachel enjoys training for CrossFit competitions and taking her pug, Penny, for long rambles.

We're thrilled to have two such skilled and experienced practitioners in our team.