

# Constructing new city-bound on and off ramps

**It's been a busy few months on the Bay Link project with the major focus being on service relocation and constructing the on and off ramps for city-bound traffic on the Bayfair flyover.**

Carrying out seamless service relocation and installation has been a critical project milestone. Gas, water, telecommunications, power, sewer and stormwater services are all below ground, so this work has to be completed before any of the above ground work can begin. It's vital that services are maintained to the nearby businesses and communities with little disruption. The team have used various techniques to do this, including drilling tunnels underground to pull cables through, and digging trenches or excavating areas to move services across, and with it all happening below ground it's somewhat difficult for motorists and pedestrians to see the progress that has been made.

The other major focus is on preparing the ground for the city-bound on and off ramps for the Bayfair flyover, and the new local road city-bound lanes. The site has been a hive of activity with six diggers, three rollers, two water carts, one dump truck and a grader working on the site. These new lanes are being prepared for the traffic switch later this year, where the city-bound traffic will be moved across so work can begin in the existing lanes.

A lot of the work has also been affecting the local roads, particularly Matapihi Road. This has been a tricky site as access to Owens Place, local businesses and Home Zone needs to be retained, as well as access for pedestrians and cyclists across SH2. The project team has been working with Tauranga City Council on ways to improve flow through the area. The upcoming work will be to widen the road, and install new kerbing and a footpath. Thank you for your patience while we carry out the work through here.

The Baypark to Bayfair Link is designed to reduce congestion and improve safety by separating local and state highway traffic, and improve walking and cycling connections.

The key features include the construction of two flyovers and improvements to the SH29A and Truman Lane roundabout, and the SH2 and Maunganui-Girven roads roundabout.



Works continue in preparation for construction of the new north-bound off ramp



Stormwater drainage installation and utility service relocation on Matapihi Road



# Stone column ground improvement

Ground improvement works for the new flyovers will begin this month in the form of stone columns.

Installing stone columns involves putting vertical columns of stone (gravel) into the ground. This is done using a crane with specialist vibrating equipment attached to create vertical columns in the ground, moving the sand to make way for the stone.

Each hole is relatively small and quick to complete. More than 3,500 columns will be constructed throughout the site to take the weight of the flyovers. The stone columns push against the surrounding ground, making it more dense and enabling the ground to support the weight of the on and off ramps that will be built on top.

Stone columns are well suited for sandy soils and help limit the consequences of future liquefaction during an earthquake. They are typically quick to construct and do not require dewatering or excavation. As a result it's quite a 'clean' process, with little waste.

Facts on the stone column work for this project:

- If you put all the stone columns end to end from the project site they would reach Waihi Beach (approximately 63km).
- The stone columns will cover more than one and a half rugby fields and use enough gravel to fill eight Olympic-size swimming pools
- The stone column method, which uses gravity and vibration, was invented in Germany in 1958.

## Vibration monitoring

Nearby residents can expect some vibration during the pavement and stone column works. We will make every effort to minimise the impact of noise and vibration during the project. Regular vibration monitoring ensures works are carried out within Tauranga City Council's consent conditions. If you have any concerns, please contact us.

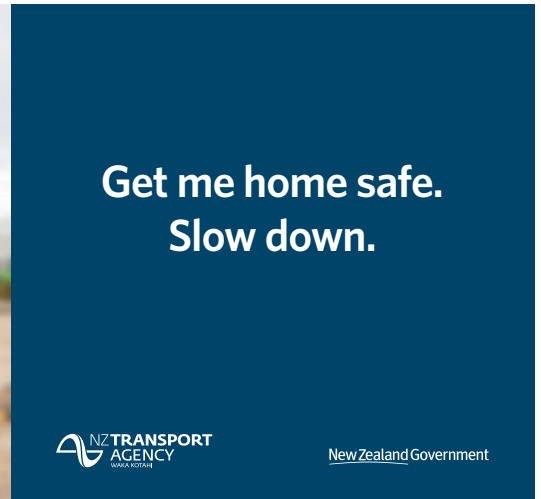
## Get me home safe. Slow down.

A 50km/h temporary speed restriction is in place for the duration of the project for the safety of drivers and their passengers, and also for the safety of people working on the project.

Please slow down, stay focused and drive to the conditions.

We will be running a local advertising campaign, using CPB Contractors' project team members, to reinforce this message.

Vehicle activated speed signs will be installed to monitor motorists' speed through the construction site. From 16 July, these screens will be activated to flash the speed an approaching vehicle's travelling at.



An example from our upcoming advertising campaign



The temporary speed limit through the Bay Link project is 50km/h



## Ghost marking trial success

**CPB Contractors have found a solution to remove old line markings through the project area and eliminate 'ghost marking'.**

When traffic is moved temporarily and new line markings are installed, the existing line markings are removed or blanked out. However, when the road is wet or the sun is at certain angles the old line markings can sometimes still be visible - often referred to as 'ghost marking'. This can be confusing to road users.

CPB trialed various methods, including black paint, clay, sand and water mix, and hydro blasting, to completely remove the lines. Their most effective option was a combination of line grinding and hydro blasting at a lower pressure, which will be used as and when needed throughout the project site.



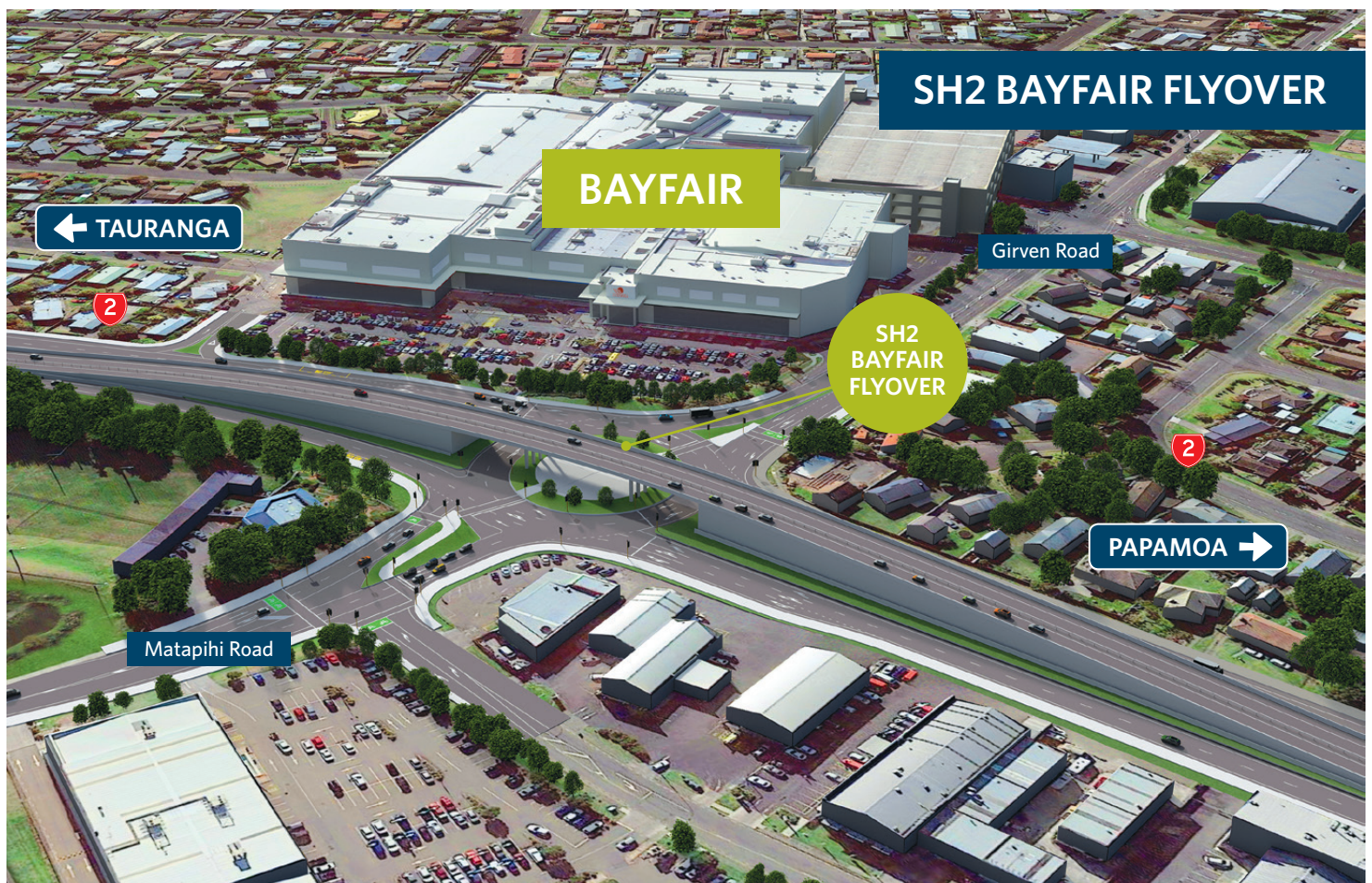
CPB Contractors have had success eliminating ghost marking

## About the new Maunganui-Girven roads roundabout

**Once completed, the roundabout at the Maunganui-Girven roads intersection will double in size and be controlled by traffic lights to remove the need for traffic to merge, and make it simpler and safer to use.**

The flyover will separate SH2 traffic from local traffic. A majority of heavy trucks will travel over the flyover, which will mean better roundabout efficiency for local road users.

Traffic lights on the roundabout will control traffic flow and provide controlled crossing points for pedestrians and cyclists. The pedestrian and cyclist route will be through the central roundabout island, with the ability to cross the road at signalised crossings. Cyclists will be able to choose between using the off-road or on-road facilities when moving through the intersection.





# Meet the team



## John McCarthy Transport Agency Project Manager

John is responsible for the delivery of the Transport Agency's major projects in the Bay of Plenty region, including the Bay Link project. A qualified Engineer, John started his career in the NZ Army Engineers before moving into major project and transport engineering. He is also Project Manager for the Maungatapu underpass project. Career highlights include Project Delivery Manager for the London Olympic Stadium and construction of the Lord of the Rings hobbit village.



## Andrea Durie CPB Contractors Stakeholder and Community Relations Manager

Andrea has spent many years in roles that interface with stakeholders and is excited to be part of the Bay Link project. The Bay Link project is in a busy part of Tauranga and Andrea's focus is to let people know what's happening on the project by providing timely updates to the project neighbours and local businesses, and responding to project queries. She is currently working on the installation of information boards around the project area.



SH29A  
TE MAUNGA  
FLYOVER

## What's happening and when...

### from September 2018

Construction of the SH2 and SH29A flyover. This will take SH29A traffic over the railway line and the Te Maunga intersection.

### from March 2019

Construction of the Bayfair flyover. This will take SH2 traffic up and over the Maunganui-Girven roads roundabout.

Work on shared cycling and walking paths will begin. Sections of the footpaths will be completed throughout the project.

### from July 2020

Work on the new signalised Maunganui-Girven roads roundabout will begin, and paths, landscaping and design features installed. Landscaping and urban design will take place once construction is complete.

### Late 2020

The project is expected to be complete.

## Keeping you informed

As part of our no surprises approach, we want to keep the community and road users as up to date as possible.



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[nzta.govt.nz/baylink](http://nzta.govt.nz/baylink)



NZTAWaikatoBoP



NZTAwaibop

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