

Kā Huanui a Tāhuna is an alliance partnership between NZ Transport Agency Waka Kotahi (NZTA) and Queenstown Lakes District Council (QLDC) along with four design and construction companies, Beca, WSP, Downer and Fulton Hogan.

31 July 2024

Kia ora koutou,

We're strengthening the reliability and capacity of underground services at Frankton. As part of this, we're about to begin some critical night work on SH6 Kawarau Road and Frankton-Ladies Mile Highway. Read on to find out about the timing of this work, detour route and how we're keeping access open to the Bus Hub and Events Centre.



Stormwater pipeline installation is continuing along SH6 Kawarau Road. Check out the new golf course entrance which takes drivers past our site office to the clubrooms.

We've also begun work at Gray-McBride Streets, building a new entrance to the Gray Street carpark before we start trenching outside the Frankton Alehouse. There's been a change to parking time limits in part of the Gray Street carpark – a reminder that if you'd like to receive information about upcoming work, email info@wtpa.co.nz with 'Work Notices' in the subject line.

In Queenstown itself, there's lots happening on the Arterial project, including the opening of the Sydney/Melbourne Street intersection earlier in the month. By laying a temporary surface, traffic can use the intersection until the weather warms up and we can return to finish the remaining road construction. This is one of the ways we try to work around freezing winter ground temperatures to maintain progress and keep traffic moving.

Thanks for reading,

Kā Huanui a Tāhuna team

SH6/6A Frankton Intersection and Bus Hub Improvements Project

Upcoming night closures and detours on SH6/6A

Converting the existing Frankton roundabout into a signalised intersection requires a lot more than new asphalt and road markings. The roundabout is also the intersection of every critical service that helps nearly half of Queenstown's population to function - including stormwater, water supply, electricity (both local and mains), gas, and telecommunications.

Put together, all these services make up about 100 individual pipes and ducts crossing State Highway 6 (SH6), in 32 individual trenches, with between one and 10 service lines in each. With the state highway being widened, most of these lines need to be shifted out of the way or buried deeper so the new Frankton Intersection and Bus Hub Improvements Stage 1 project can be built.

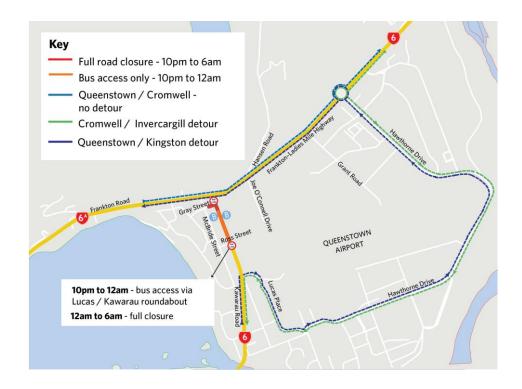
These service connections need to be made across the state highway via a series of trenches that can only be excavated, filled and the road surface repaired at night. This will be done over a series of nights (weather permitting) from Sunday, 11 August through to mid-September 2024.

A detour will be in place around Queenstown Airport between 10pm and 6am while work is underway, as shown in the maps below. We also need to do a couple of nights' work

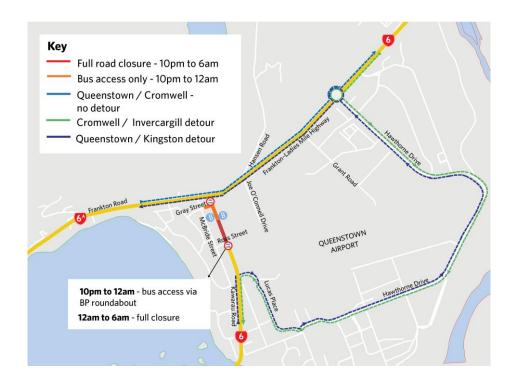
on SH6A, outside BP and Burger King. When this short section of highway is closed, we'll detour traffic via Gray and McBride Streets.

These are our planned dates of work, but they may change if we're able to finish a stage of work more quickly, or if it takes longer due to weather or other circumstances. For up to date information about bus timetables, visit www.orc.govt.nz/orbusqt

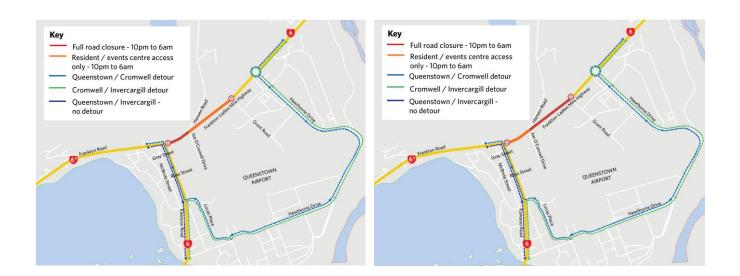
SH6 Kawarau Road, 11-15 August 2024



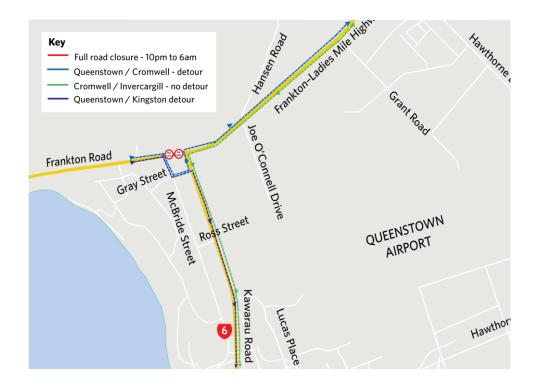
SH6 Kawarau Road, 15-22 August 2024



SH6 Frankton-Ladies Mile Highway, from 25 August - 5 September 2024 (there will be a changeover of fully/partially closed sections during this time)



SH6A Frankton Road, 8-11 September 2024



Shifting these utility services to connect across SH6 gets us ready for rebuilding the highway. It means we'll be able to underground power lines, renew stormwater and gas and internet lines, connect to new traffic and pedestrian signals, and provide a safer and more efficient network for people walking, cycling or driving through this area.

Accessing key services such as the Bus Hub and Events Centre during closures

We must maintain access for people using public transport or tour transfer services at Frankton.

Kā Huanui a Tāhuna representatives have been working with ORC Public Transport staff and recently met with bus and tour operators. We shared our plans for construction and gained feedback on how we can best minimise service disruptions and accommodate operators' needs.

We've planned the upcoming road closures so residents and people using the Frankton Bus Hub on Kawarau Road, and the Queenstown Events Centre on Joe O'Connell Drive, can get to these services when they need to.

The maps above show how small sections of the highway will be fully closed, while larger sections will allow residents, Frankton Bus Hub users, and Events Centre visitors access at certain times while these facilities are open.

Otago Regional Council will provide updates on its website and the Orbus Queenstown Facebook page about any Orbus bus detours – visit orc.govt.nz/orbusqt or facebook.com/OrbusQT.

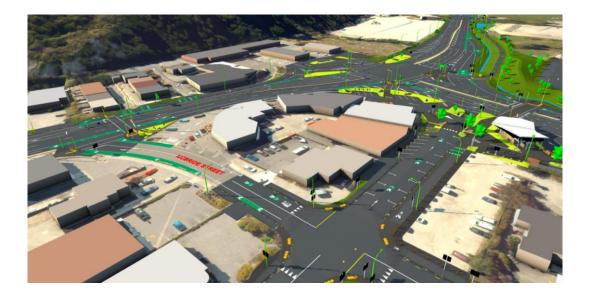
Work begins at Gray-McBride

We're now underway at Gray-McBride Streets, preparing to move core services out from underneath the SH6/6A Frankton intersection and into these local roads.

The Gray-McBride section of this work has been split into two stages. Stage 1 involves undergrounding the power network, and will be least disruptive to local businesses, residents and people visiting or travelling through this area.

The more disruptive parts of this work, such as trenching across the streets and night work, will be done during Stage 2. We will plan this work to minimise impacts as much as possible. Stage 2 is expected to take place from late September 2024.

The work is expected to take approximately 12 months. We'll take a staged approach, working with residents and businesses throughout to understand and support their access needs.



Plan showing the Gray-McBride Street and SH6/6A intersections once completed.

New carpark entry

The first step is to create a new driveway entrance to the Gray Street carpark from McBride Street, shown in the map below. This means that when we start work on Gray Street in coming days, we'll be able to use the carpark to detour traffic as well as keeping access open for businesses and residents at the Frankton Village retail area.



A new carpark entrance on McBride Street will help maintain access to Frankton Village.

Gray Street

Over the month of August, we'll be working in and around Gray Street as we excavate trenches to relocate and underground the power network.

We need to temporarily remove on-street parking at times, but we'll make sure that people can get to the shops, and vehicles can use the driveway into Frankton Village, when they need to. Follow the directions of crews who may be managing access and guiding people through the construction area.

There's no change to traffic travelling in either direction along McBride Street during this time.



There are changes to on-street parking as we prepare to start work on Gray Street.

Changes to parking time limits



We're helping people get to Frankton Village businesses during construction on Gray Street with temporary P30 parking spaces.

We fully appreciate that parking is tight in this neighbourhood however, due to the loss of on-street carparks during construction, we need to provide alternative parking for people visiting businesses in and around Frankton Village.

This is why parking times within part of the Gray Street carpark are changing during the construction period.

'P30 8am-6pm Mon–Fri' parking has been put in place along the northern side of the Gray Street carpark (as shown above) until we finish working within Gray Street. These carparks will be monitored by parking wardens to support easy access to neighbouring businesses.

Nuclear testing in Queenstown?

People passing by the new stormwater pipeline trench at Frankton may have noticed there's a lot more to the process than just digging a big hole and putting the pipes in.

Crew members have been using a Nuclear Density Meter, an instrument commonly used in road construction, to check that the new ground which holds and surrounds the new

pipe is sufficiently strong. This is critical because the pipe, once laid, has to stay in a precise place.

If a pipe is well laid, when the ground or road is formed above it, that new surface stays perfectly smooth. However, if the quality of ground fails, the pipe can get out of alignment due to the ground surrounding it shifting up, down or sideways.

"It's a precise business, but our team is focused on doing this once and doing it well," says Alliance Programme Manager Edward Husband. "When you're laying more than 100 pieces of 1.4m-diameter PVC pipe, there's no room for error - but our team is on track for completion in September."



Using a Nuclear Density Meter (circled), a Kā Huanui a Tāhuna team member checks the strength of the compacted base of the trench before the next large section of stormwater pipe is laid.

For more information

Full details about the SH6/6A Frankton Intersection and Bus Hub Improvements project can be found at our website, <u>Queenstown package | NZ Transport Agency Waka Kotahi (nzta.govt.nz)</u>.

Contact the project team by emailing info@wtpa.co.nz or by phoning 0800 482 684.

If you'd like to receive upcoming Work Notices for this project, please email info@wtpa.co.nz with 'Work Notice' in the subject line.

What's the Latest: Town Centre Arterial (Stage 1)

All action on the Arterial road

It's been another busy month of progress constructing stage one of the Arterial Road.

Our crews are close to completing the below ground work, which has involved shifting, upgrading and installing new underground services along the full length of stage one, between Frankton Road and Gorge Road.

The Sydney/Melbourne Street intersection reopened mid-month, and since then our crews have been busy upgrading footpaths, installing light poles and preparing garden beds for planting in spring.

The wall in front of St Joseph's school is now complete and by hydroseeding the filled area behind the walls, the kids will have an improved grass space ready for spring games and summer sports days.



Thanks to the St Joseph's School community and church for their patience... we're almost there!

There's been a change in the Dublin Street traffic layout now that the intersection is open. The right-hand turn has been removed from Frankton Road, so access has reverted to a left-hand turn in and left-hand turn out onto Frankton Road only.

This has allowed our crews to start working on the final pieces of underground utilities and ground preparation on the lakefront side of Frankton Road.

Meanwhile on Henry Street, the supporting props have been removed from another section of retaining wall, revealing the next integration of cultural expression within the

etched precast concrete panels. More information will be shared about the walls in their entirety when the road opens at the end of the year.



The pūrākau (traditional stories) of Kāi Tahu are being shared through the many etched murals on the new Arterial Road retaining walls.

Supporting more local options for power supply

As part of the arterial project we've installed two ducts which will enable Powernet to provide a new power distribution network in the centre of Queenstown. Currently Powernet operate in the Frankton area, Wānaka, Invercargill and Southland.

Having another power network in Queenstown will encourage competition in the market and give residents and businesses another option when choosing their energy provider.

The ducts have been installed for the length of the project. To complete the network Powernet will need to fill gaps in the duct at each end, and along Frankton Road to extend their cable into town.

The Frankton Intersection and Bus Hub Improvements Project is helping with this by providing some of the link between the BP roundabout (SH6/6A intersection) and part way down SH6A. This will be done through the work at Gray-McBride Streets.

You can read more about the Town Centre Arterial project, including FAQs at www.qldc.govt.nz/town-centre-arterial-road

Your questions answered

We appreciate your comments and feedback. If you have anything you would like to know, please email info@wtpa.co.nz. We'll continue to answer your questions in future newsletters.

This month's Q&As delve into why we need to move utility services for the Frankton Intersection and Bus Hub Improvements project, why we need to do the work at night, and the benefits for everyone who uses these in the Frankton area, and further afield.

What's happening?

Power, gas, fibre, water supply and stormwater pipes are being moved out from underneath the State Highway 6/6A intersection to new pipes. This work is integrated with utility work in the Gray-McBride Street intersection.

We're also relocating any other utility services that are located near these essential utility trenches, that can reasonably fit in the trenches at the same time. By doing this, they are more accessible for the asset owners and it prevents future excavations in the road and disruption to traffic.

Why are there so many services to move?

In and around the intersection we have the main fibre cable for Queenstown, power connections for Queenstown, the airport, Jacks Point and Kelvin Heights communities, the gas main connecting Queenstown and Frankton, and the water main connecting Frankton to Frankton Road and the southern corridor.

For this project, we're expanding the intersection footprint and changing the ground levels for the new intersection. This means we need to shift a lot of the existing services, which were installed in the verge/shoulders of the highway to be more easily accessible for the asset owners.

We are also installing significant new services, such as the 1.4m-diameter stormwater pipe to serve future land development at Frankton, and a new Intelligent Transport Systems network for the traffic signals and cameras.

Why are they in so many different places?

The services are where they need to be to provide connections to the different 'customers'. They were installed in the space available to them when each particular service came along, over decades of development at Frankton and surrounds. There are requirements for minimum separations between services as they run alongside and cross each other, and they can be placed at different depths as well - particularly for gravity-fed services.

As utilities placement is on a 'first in, first served' basis, underground service ducts can end up looking like a bit of a bird's nest!

Services are placed underground as it makes them less vulnerable to outages from factors such as wind, snow or trees, is less visually intrusive, and safer for people travelling on the adjacent roads. Depending on when they were laid, records of service locations are not always complete, therefore even with the best investigations to locate underground services there is always a risk of coming across an undisclosed line.

Why undertake this work at night?

There are many factors that have influenced this decision:

Maximising efficiency

- We have coordinated with teams from Aurora, Delta, Rockgas, Chorus, Powernet, and Veolia who look after QLDC stormwater to dig all their trenches together and in specific places, lay all their ducts in trenches, so that they can all come back and shift their customers to their new networks when they're ready.
- Also, by shutting SH6 at night, the road can be rebuilt safely and quickly in time for re-opening to traffic at 6am the next morning.

Minimising disruption

- Shutting this busy state highway during the day is just too disruptive for Queenstown's travelling visitors and residents alike.
- Between 10pm and 6am Queenstown's traffic is lowest, so working in that time holds people up as little as possible.
- We've also minimised delays to scheduled bus timetables and to bus and coach
 operators by enabling access through to Frankton Bus Hub and minimising the
 road diversions that affect the certainty of achieving a reliable bus timetable.

Good, planned staging

- This work on SH6 at night is coordinated with work in the Gray-McBride intersection. Together this work prepares us to work on the bus hub and to rebuild the SH6/6A Frankton intersection.
- We're doing all underground services in integrated stages, so we don't do one at one depth and complete it, seal it over and then come back several months later and disrupt everyone all over again. We're working to an integrated plan.

Smart traffic planning

 There are viable local detour routes within Frankton that can take the pressure off local traffic.

Time-limited construction season

 It is not possible to construct or surface road pavements during the winter season from May to August, but we can build trenches. This surfacing constraint is standard for the winter in New Zealand, however, the restriction on pavement construction is unique to the South Island/Queenstown Lakes area due to the local climate and freezing and thawing of the pavement. The ground temperature is at 0 degrees or less all winter – and even without this consideration, it wouldn't be dry enough to successfully surface new roads.

There are some sections that can only be done at night

 The SH6/SH6A (BP) roundabout is one of the busiest intersections in the South Island with over 40,000 vehicles per day passing through it at the busiest times of the year. Work forming trenches across the state highway will be done at night to minimise traffic impact.

For more information on the SH6/6A Frankton Intersection and Bus Hub Improvements project please click here

For more information on the Queenstown Town Centre Arterial Stage 1 please click here

For more information on the Queenstown Town Centre Street Upgrades programme please click here

For more information on the Lakeview Development please click here

For more information on the Wakatipu Active Travel Network please click here

The Kā Huanui a Tāhuna team thank you for your patience. We are listening to your feedback and working hard to minimise disruption.

Please contact us should you have any queries or concerns:









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