Christchurch Northern Corridor Finishing touches

PROJECT UPDATE

26 MARCH 2021

Motorway open since 17 December 2020

The new CNC motorway and the QEII Drive and Cranford Street four-laning is improving access to central Christchurch, industrial hubs on the eastern side of Christchurch, the Lyttelton Port and enables further development in north Christchurch and Canterbury.

Travel times for both through-traffic and local trips have improved.

Around 23,000 cars a day are using the motorway on average. The shared path is loved by locals and commuters with already more than 300 cyclists a day using the new infrastructure.

FINAL TOUCHES TO COMPLETE ALL THE CONSTRUCTION WORK

The Christchurch Northern Corridor (CNC) project team is almost ready to leave the building... We still have minor work to do on the landscaping, line marking, some signage work and the final asphalt layer on the motorway and QEII Drive will still need to be applied.

Final surface and low noise asphalt

By October this year the motorway will have weathered and compacted for a year and the ground temperature should be high enough for road sealing conditions. We will start by applying a second layer of chip seal on the new motorway, the local road bridges and parts of QEII Drive, this will make the road surface fully waterproof. Following on from this we will apply the final asphalt layer.

Weather and temperatures permitting, we will start this work in October and we will be finished in early 2022. It is likely that much of this work will need to happen at night.

Night work Cranford Street roundabout

On Sunday night 28 March we are working on Cranford Street, between the roundabout and Cranford Park shopping area.

We are asphalting the shared path. The work starts from 8pm and will take around five hours to complete. Nearby residents will hear the noise from the truck movements and may notice the extra (flashing) lights coming from the paving equipment.

REDUCED COMMUTER TRAVEL TIME

REDUCED CONGESTION

IMPROVE SAFETY

IMPROVE WALKING AND CYCLING

SUPPORT ECONOMIC GROWTH

As part of this project's noise control measures, we will be applying low noise asphalt (photo above) over the current chip seal (top photo).

Re-sealing work and asphalting will start in October this year.

NOISE EXPERIENCE

We have received concerns from some local residents living close to the motorway, that the noise coming from CNC is louder than expected. Currently around 23,000 cars are using the new motorway on a daily basis, and this is expected to grow to 35,000 over the next decade.

Waka Kotahi NZ Transport Agency assessed the potential noise impacts and mitigation options through the process set out in the NZ Standard for Road traffic noise – new and altered roads (NZS 6806:2010).

Testing and noise modelling were used to predict the traffic noise level on the CNC project, and these findings determined the design and the noise mitigations for each area of the project. Noise reducing earth bunds, fences and concrete barriers have been constructed in areas near housing. It is believed that these mitigations, together with an asphalt surface, will keep noise to an acceptable level.

Low noise asphalt

All the noise mitigations required for this project are in place except for the final asphalt layer on the road. Low-noise asphalt will be used along most of the new motorway. This is a quieter surface than the chip seal used on many roads in Christchurch. The asphalt surface cannot be laid until the next sealing season (spring) after the road has had a chance to weather, this is in line with industry best practice.

Due to the current concerns around the noise experience we have done some early monitoring before we apply the final asphalt layer. We were keen to know if our design is on track to keep the traffic noise at or below the levels predicted in the noise modelling. We measured the sound levels in seven locations along the project with results between 54-61dB.

Early results show the mitigations already in place, the bund, fences and concrete barriers are working as expected. Once the low noise asphalt is applied, we expect this level will drop another 5 to 7dB. Anything over 3dB will be a noticeable difference.

FREQUENTLY ASKED QUESTIONS

- **Is the new motorway noisier than expected when compared to other roads in Christchurch?**

*When measuring the noise levels for the new motorway we asked Marshall Day, our acoustic experts, to also provide details on how this compares to other roads. The current noise level on CNC compares well with the noise levels for other busy roads, for example the Christchurch Southern Motorway 69dB (measured near Wigram subdivision) and 68dB on Yaldhurst Road, 67 dB on Memorial Avenue.**

We know that chip seal surfaces are noisier than asphalt so we are confident that the noise from the traffic on CNC will reduce by 5-7dB once the asphalt has been applied. Re-sealing and asphalting will start in October 2021.

**Marshall Day, measured noise levels LAeq 24hr for current traffic flow and surfacing.*

FREQUENTLY ASKED QUESTIONS

- **Can you reduce the speed limit on the motorway to 80km/h to reduce the noise?**

Decreasing the speed limit will reduce noise. However, in order to be effective a substantial reduction is necessary. Reducing the speed limit to 80km/h would only reduce the noise leave by 1 to 2dB and this is not noticeable to most people.

The Christchurch Northern Corridor is designed, constructed and maintained at 100km/h and the speed limit for heavy vehicles and vehicles towing remains at 90km/h. There would be little to no benefit in reducing this speed limit. The motorway with a speed of 100km/h provides for several benefits: reducing congestion, reducing travel times and improving productivity (net economic benefit).

- **Could you plant more trees or dense vegetation to reduce the noise?**

Trees and shrubs indeed provide a psychological impression of less noise but are not the most effective barriers. Dense vegetation makes little difference. Sound experts will recommend impermeable barriers of concrete or wood, they deflect noise much better than for instance hedges.

The CNC urban design landscape plan is actually not part of the noise mitigation measures, it may over years contribute a little, but the earth bund with timber fences, the concrete barriers and the special asphalt will make the noticeable difference.

- **What about the gap in the fencing at Owen Mitchell Park?**

Noise mitigation measures work best when: they are close to the source of the noise - like the concrete barriers or close to housing like to the earth bund and fencing. There is a gap in the bund and fencing at Owen Mitchell Park to allow for safe access to and from the park and the shared path on the CNC. As there is no housing near this gap in the bund and fencing, it is not creating an area where housing will have a noise level over the traffic noise standard.

- **Will the noise level increase as traffic numbers increase?**

Noise increases with vehicle numbers, that's why the mitigations for the motorway were designed with a higher number of vehicles in mind (we are expecting about 35,000 vehicles in a decade or so). We are confident that the CNC motorway will still meet the noise levels predicted by the modelling with increased traffic on it, when all the noise mitigation measures are in place (including the asphalt layer).

HISTORY IN 11 STEPS - NEW INFO PANELS ALONG THE CNC SHARED PATH

Many sites along the Christchurch Northern Corridor hold great significance for ngā uri of Kati Urihia, a sub-hapū of Ngāi Tūāhuriri. People using the CNC shared path that runs alongside the new motorway can now learn more about the area's history and the surrounding environment by reading newly installed storyboards.

The steel interpretation panels can be found along the new shared path at key culturally significant sites.

BLESSING CEREMONY

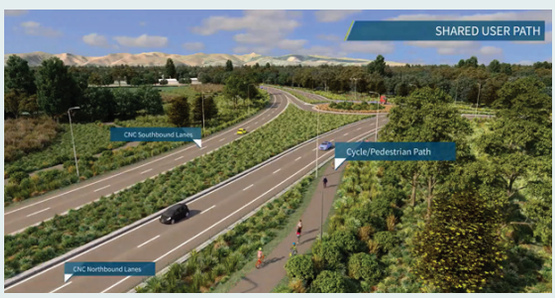
The design for the interpretational panels was officially revealed on Thursday 18 February.

The interpretational panels depict the history of the area and the importance of the North Canterbury and Christchurch environment.

To bring to life the rich history of this ancient trail, the CNC Alliance worked with Lyttelton-based writer Liz Grant and Ngai Tahu Whakapapa unit manager Arapata Reuben. Artist Morgan Mathews-Hale, of Kaitiaki Studios, designed the steel artworks and information panels.

A roundabout connects the motorway with Cranford Street.

Within the Cranford Street central median there are places to make a U-turn.



More information on the use of our new infrastructure is available in our animated video section on the website.

Carpooling saves you money and is more environmentally friendly than driving alone. You can cut your fuel and parking costs, while reducing congestions and harmful emissions. Learn more about the CNC T2/carpool lanes, the direct bus services to the CBD and the Park & Ride facilities in Kaiapoi and Rangiora at:
www.nzta.govt.nz/letsride

On Wednesday evening 31 March at the St Silas Church Hall, there is a meeting to answer any questions on the noise experience. Redwood residents can drop-in from 6.30pm to view the recent readings and a question and answer session will begin at 7pm till 8pm. St Silas Church, 237 Main North Road, Redwood.

Visit the project website: **www.nzta.govt.nz/cnc** for more information and contact details.

WAKA KOTAHI NZ TRANSPORT AGENCY / Christchurch City Council / CNC ALLIANCE

New Zealand Government