

To: Rodney Local Board

From: Parag Gupta, Project Manager

Contact Information parag.gupta@at.govt.nz

Date: 18 March 2024

Subject: Inform Progress Update on Mill Flat Road Bridge Project

Purpose

To inform Rodney Local Board (RLB) on the progress of the Mill Flat Road Bridge project, being delivered as part of Auckland Transport's (AT) Flood Recovery Programme.

Highlight

• Funding approved for a two-lane bridge with a footpath, and intersection safety improvements comprising a right-turn bay and localised widening at the intersection.

Context

For detailed context regarding the purpose of the Mill Flat Road Bridge replacement project, and the process AT was undertaking to secure funding for the bridge replacement project, please refer to the memo that was issued to RLB on 21 September 2023, and attached to this memo.

Progress to date

Mill Flat Road Bridge

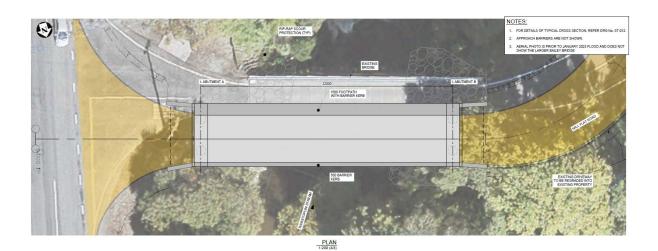
As mentioned in our earlier memo, AT followed NZTA's Business Case approach to identify the most feasible solution to the problem, i.e. the previous bridge that was washed away during the flooding last year, essentially cutting off the Mill Flat Road community from the surrounding road network. This approach identified the following solution, that AT is progressing with, onto the Detailed Design stage.

- Two-lane bridge with a footpath on one side
- Two 3m wide traffic lanes, single 1.5m wide footpath on the southern side of the bridge
- No vehicle class or weight restriction on the new bridge
- The entire horizontal alignment of the bridge to be moved slightly upstream, while still using some of the existing footprint
- This is to enable continued community access throughout the construction of the new bridge, as the construction of the two-lane bridge is planned to be staged
 - Stage 1: build the upstream lane first, while the community continues to use Bailey Bridge to commute
 - Stage 2: dismantle the Bailey Bridge, move the community traffic onto the newly constructed lane, and build the other half on the existing footprint





- In terms of vertical alignment, the new bridge will sit approximately at the same height as Bailey Bridge
- The revised peak flood levels suggest that:
 - the new bridge will be flooded in 1 in 25-year rainfall event, with potential minimal damage to the pedestrian handrails
 - the new bridge will be flooded in 1 in 100-year rainfall event, but robust enough to withstand the effects and not be washed away again
 - o the surrounding road network will be well within the peak flood levels, making it impractical for vehicles to even approach the bridge



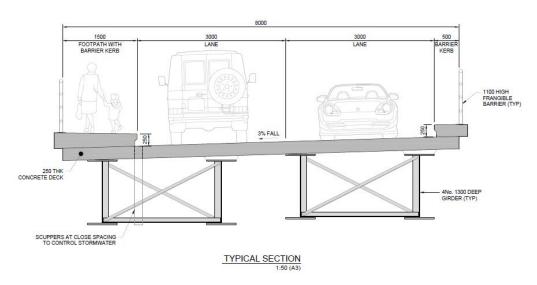


Figure 1: Proposed Bridge Design

Mill Flat Road / Coatesville-Riverhead Highway Intersection

Since our last update to RLB, AT received significant number of concerns from the community urging us to consider providing safety improvements to the Mill Flat Road / Coatesville-Riverhead Highway intersection, as the existing bend in the road, to the north of the





intersection, creates a blind spot for the southbound vehicles and are sometimes not able to spot a turning vehicle waiting at the intersection in time, resulting in near-misses. AT followed the similar approach, as the bridge, to identify a solution to this issue of safety at the intersection, and identified a right-turn bay on Coatesville-Riverhead Highway as the most feasible solution. This will require some localised widening of the road, and retaining walls along the bank of the stream.

The figure below shows the proposed layout of the two-lane bridge, along with the right-turn bay at the intersection.



Figure 2: Proposed design for Two-lane Bridge and Right-turn Bay

Funding

In August 2023, the Central Government announced that the Crown would contribute up to \$110M to Auckland Council, for local transport networks affected by the weather events. This funding is being managed by Crown Infrastructure Partners (CIP) and AT submitted an application for the project to CIP in 2024.

In March 2024, CIP approved the funding request, and has agreed to grant 100% funding for a two-lane bridge with footpath, along with the intersection improvements. Based on this, AT is progressing the design (as presented in Figures 1 and 2 above) to the detailed design stage.

Programme

The project is undertaking an accelerated approach, with the Detailed Design expected to finish by July 2024, same time as we anticipate obtaining all required resource consents by. The project is currently programmed to award the contract for physical works and go for construction by November 2024, with the actual physical works commencing in January 2025. The estimated duration of physical works at this stage is 12 months. This will be confirmed later when the detailed design is complete and construction methodology has been developed.





Engagements so far

The project team have attended the Coatesville Transport Forum twice now, in November 2023 and February 2024, that is chaired by now Minister Mark Mitchell and attended by RLB deputy chair, and other key representatives from the community.

We also engaged with the community through a WhatsApp group that was specifically created to provide live updates during the (Geotech) site investigations in January 2024 that required closure of the Bailey Bridge for a period of less than 10 min twice a day, over two days.

This WhatsApp group was also used to provide a live update regarding the one-hour bridge closure that was required by our maintenance contractor to inspect the structural integrity of the Bailey Bridge in February 2024, as we were notified of businesses disregarding the weight limit on the bridge and allowing heavier trucks, over the permitted limit, to pass through the bridge. The inspection report confirmed that there was superficial damage to the wooden boards on the deck – cracked and broken at a few places, which have been repaired; vehicular damage to one of the inside panels, which has been repaired; and shotcrete cracked at a few places, which will be monitored over time.

Planned Engagements

With the funding confirmed, the AT project team will commence engaging with the AT Partners and all other external stakeholders in the coming weeks, and inform about the funding outcome and present the design. We are also planning to organise a drop-in session for the community on 10th April, to present the design and provide an update.

Next Steps

- 1. Lodge resource consent application in April 2024
- 2. Finish Detailed Design in July 2024
- 3. Re-engage with the AT Partners and the community once the detailed design is complete and all necessary consents have been obtained
- 4. Award contract for Physical Works to the successful tenderer by October 2024

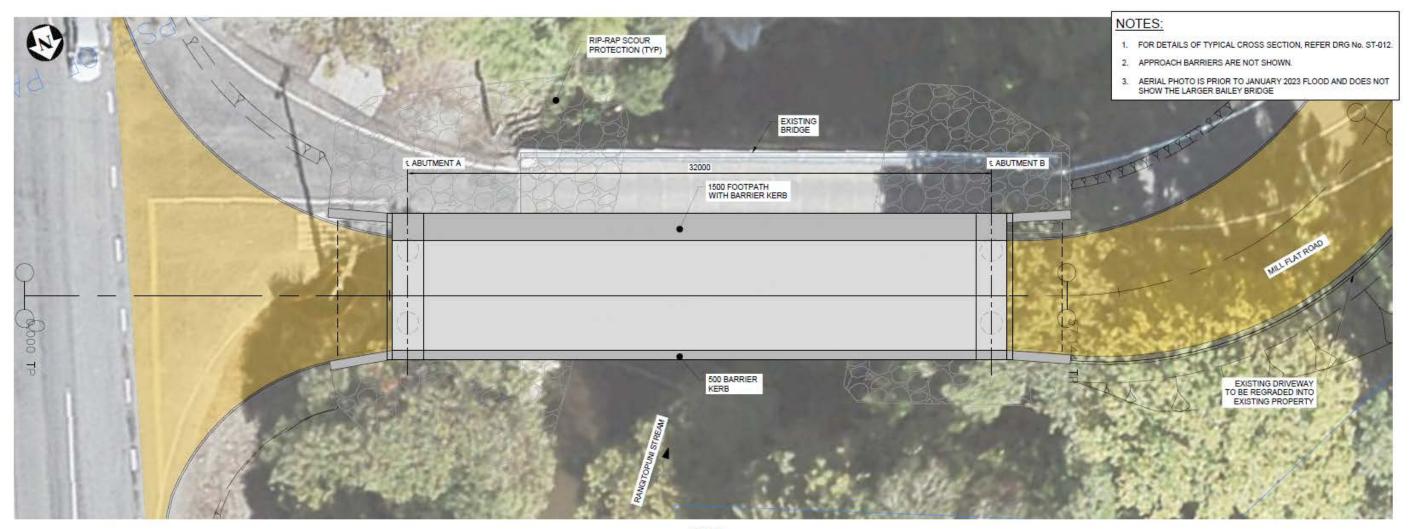
Attachments

- 1. Latest Bridge and Intersection Design
- 2. RLB Memo, dated 21 Sept 2023

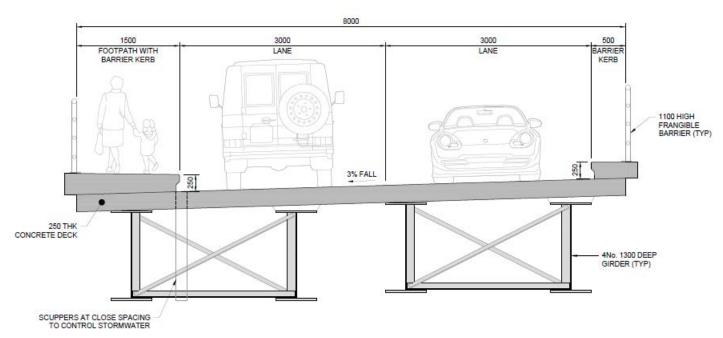




Concept Bridge Design:



PLAN 1:200 (A3)







Right-Turn Bay Design:



