



Report 05.56
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Committee Hutt River Advisory Committee
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Hutt River Floodplain Management Plan: Project Manager's Report

1. Purpose

To update the Hutt River Advisory Committee on progress made with implementing the Hutt River Floodplain Management Plan (HRFMP)

2. Project status summary

Cashmore Contracting Ltd is making good progress with the Strand Park river realignment contract. This work is on track for completion by August 2005.

The Strategy and Policy Committee of Hutt City Council (HCC) will consider the proposed changes to the Hutt City District Plan at their meeting on 23 February 2005.

Preparations are well underway for the additional minor works at Belmont.

Opus International Consultants Ltd is working through refining the design for upgrading the Ava Rail and Strand Park stopbanks.

3. Ava to Ewen project

The Strand Park river realignment contract is on track for completion by August 2005. Report 05.53 of this order paper provides more details of this work and the other components of the Ava to Ewen project.

4. Belmont improvements

Edge protections

Good progress is being made with the additional minor works required to further reduce the erosion hazard. About 300 tonnes of rock have been delivered to site for the groyne extension outside 11 Charles Street. This work will be constructed by Flood Protection's Mabey Road staff in March 2005. A contract has been let to extend the 900 mm stormwater outfall pipe at the end

of Charles Street. This is due to be completed by March 2005. These works will further reduce the erosion hazard to three properties at the end of Charles Street. The proposed 'building setback line' in Hutt City District Plan change assumes that these works are in place.

Norfolk Street stopbank

At the September 2004 meeting, the Advisory Committee considered the views of the Norfolk Street residents and endorsed a proposal to investigate two other options (raised road and Gate/stoplog arrangement) for closing the gap across Norfolk Street. The residents no longer support the sandbagging option.

- ***Raised road option***

We have completed the hydraulic investigations for the raised road option. This proposal is to continue the stopbank across the road, from east to west to the outside edge of the footpath with a smaller gap which can be closed by placing stoplogs. Our hydraulic modelling assumes that there are no stoplogs in place at the time of stormwater flooding.

Norfolk Street serves as an overland flow path for stormwater flooding. The maximum discharge that could be expected on Norfolk Street during a 100 year rainfall event on the western hills is about 6 cumecs. However, we used a range of flows from 1 to 6 cumecs to identify what effects the proposed works would have on stormwater flood levels.

Our investigations show that this option would have adverse effects on upstream stormwater flood levels. The proposed works would increase stormwater flood levels by 300 to 400 mm even for relatively low flows. As such, we have decided not proceed any further with this proposal.

- ***Gate/stop logs option***

In this gate/stop log option, the full width of the road will be available for stormwater flood events to pass through without any constriction. We have investigated the operational requirements for stop log and gate arrangements and we prefer a gate arrangement where the gap can be closed in the shortest time with minimum manpower. We are now proceeding with the detailed design for a gate arrangement.

5. Whirinaki Crescent stopbank upgrade design

Report 05.54 of this order paper provides details of the Whirinaki Crescent stopbank upgrade design and land purchase negotiations.

6. Hutt River gravel management

At the September 2004 meeting, the Advisory Committee endorsed increasing the gravel extraction rate to 30,000 m³ per year for the Ewen Bridge to Belmont reach of the Hutt River. Horokiwi Quarry has already commenced extraction operations at this increased rate.

There is considerable public interest on the effects of gravel build up in the reach from Ewen Bridge to Belmont (Melling Reach). This build up does affect floods normally contained within the river channel. We believe that the higher than expected peak flood levels in the lower reaches of the river during the January 2005 flood event was a factor in the gravel built up.

The January 2005 flood has probably deposited more gravel in the lower reaches of the river. Given that the Hutt River bed levels are currently marginally above the recommended maximum bed levels for this reach, we have commissioned Connell Wagner Limited to carry out a limited river cross section survey to assess any changes. We expect this survey to be completed by late February 2005.

If this survey confirms a further build up of gravel in the lower reaches, we will propose a further increase to gravel extraction rates to lower the river bed levels to a sustainable level.

7. Implementing non-structural measures

Report 05.55 of this order paper provides details on the status of implementing non-structural measures.

8. Project budget

Project package	When constructed	Project budget as at June 2003	Cumulative expenditure to December 2004
Ava to Ewen Channel realignment	March 2004 to August 2005	\$4.86 M	\$2,455,900
Alicetown stopbank	July 2005 to December 2006	\$2.75 M	\$152,400
Ava bridge stopbank	2005/06 to 2007/08	\$5.77 M	\$269,100
Strand Park stopbank	2008/09 to 2009/10	\$2.95 M	\$12,800
Total Ava to Ewen		\$16.3 M	\$2,890,200
Non-structural implementation	2001/02 to 2003/04	\$0.25 M	\$197,000
Belmont edge protection	2003/04	\$0.81 M	\$763,800
Norfolk Street stopbank	2003/04	\$0.115 M	\$68,800
Whirinaki Crescent	2006/07	\$0.544 M	\$49,600
Total HRFMP		\$17.5 M	\$3,969,400

9. Communication

Communication initiatives, including press releases, newsletters and meetings with residents are in place for all the HRFMP projects. Once the results of the new bed level survey have been considered a press release will be appropriate.

We will meet with Hathaway Avenue residents in early March 2005 to discuss options for managing the flood risk until the new stopbank is constructed.

10. Recommendations

That the Committee:

1. *receive the report*
2. *note the contents of the report*

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