

Report 09.692

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Committee Hutt River Advisory Subcommittee

Authors Jacky Cox Engineer

Daya Atapattu Team Leader, Western FMPs

## Hutt River Floodplain Management Plan: Maoribank rock work and Ebdentown erosion protection work

## 1. Purpose

To advise the proposed process and programme for the completion of urgent rock work at Maoribank bend and erosion protection work at Ebdentown.

## 2. Significance of the decision

The matters for decision in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

# 3. Background

Two capital works projects are proposed in the upper part of the river this financial year. These are the urgent rock work at Maoribank bend, and erosion protection work in the vicinity of the Ebdentown drainage channel near to Gibbons Street.

The results of the investigation into the degradation of the riverbed between the Totara Park and Norbert Street Bridges were reported to the Subcommittee in March 2009 (Report 09.141). The investigation noted that the area most at risk from erosion damage extends between Maoribank bend and the Norbert Street Footbridge. A programme of urgent mitigation measures was developed to 'hold' riverbed levels to ensure the integrity of the erosion protection structures upstream of the bend are maintained. The most pressing mitigation measure is rock work to prevent further erosion of the bedrock immediately upstream of the bend.

The construction of erosion protection work at Ebdentown will protect the outlet of the Ebdentown drainage channel outlet, the Ebdentown training bank and SH 2 from erosion damage. The drain forms an integral part of the

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stormwater system that drains the Upper Hutt/Wallaceville area during high rainfall events. Any erosion damage to the training bank would also put SH2 at high risk.

**Attachment 1** shows the location of the Maoribank rock work and the approximate extent of the Ebdentown erosion protection work.

### 4. Proposed work and programme

#### 4.1 Maoribank rock work

The Maoribank rock work (stage 1) will involve the placement of approximately 700 tonnes of large rock of about 0.8 metre in diameter against the true left bank. The rock work will start approximately 20 metres above the bedrock outcrop, to protect the existing lateral basket work, and continue for a further 30 metres downstream of this point into the erosion 'gut' formed in the bedrock (refer to the enlargement in **attachment 1**); this work is permitted under the Hutt River 'global' operations resource consent.

Tenders for the rock supply are currently being sought. The rock will be stockpiled on the true right bank on the edge of Awa Kairangi Park; access to the river will also be from this location. Rock will be placed using hired plant and supervised by our own operations staff.

Construction is scheduled for December 2009. However, this is dependent on rock supply. Construction may be delayed to March 2010 if suitably sized rock is unavailable. This is an area of high recreational use so work will be programmed to avoid the peak summer months.

Further mitigation measures (stage 2) are programmed in 2013/14 for this reach. This work will involve the construction of a rock ramp upsteam of the bend and strengthening of the existing erosion protection works.

#### 4.2 Ebdentown erosion protection work

The project to complete erosion protection work at Ebdentown will be spread over the 2009/10 and 2010/11 financial years, subject to securing New Zealand Transport Authority (NZTA) funding. Detailed design and preparation of the resource consent will be done this financial year, with construction in 2010/11. Ebdentown is located within the River Works Agreement (RWA) reach of the river so we expect the erosion protection work to be jointly funded on a 50:50 basis with the NZTA. We have initiated discussions with NZTA to secure funding under the RWA. Report 09.684 provides details of these discussions and other matters.

Initial work will take the form of a feasibility study. The study will present a preliminary design showing the extent and type of the erosion protection, estimated costs and an assessment of the benefits to SH2. This study will also form the basis for further funding discussions with NZTA.

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Once the results of these discussions and the availability of funding from NZTA are finalised, the actual construction date will be set. An update report to the Subcommittee will be provided once NZTA's position is known.

The table below details the proposed programme for the completion of these two projects.

Maoribank rock work (stage 1)	
Detailed design including topographical survey of erosion gut	November 2009
Rock supply to site and construction	December 2009
Maoribank rock work (stage 2)	
Complete construction of rock ramp and strengthen existing erosion protection works	2013/14
Ebdentown erosion protection work	
Site survey	November 2009
Engage consultant to develop concept designs	December 2009
Feasibility study	January – February 2010
Commence funding discussions with NZTA	March 2010
Detailed design of preferred option	April – May 2010
Prepare resource consent application	April – May 2010
Lodge resource consent	June 2010
Construction (dependent on availability of NZTA funding)	December 2010 – March 2011

# 5. Budget

A total of \$1.69 million has been provided in 2013/14 and 2014/15 to complete the mitigation measures between Maoribank bend and the Norbert Street Footbridge. The estimated cost to complete the urgent rock work this financial year is \$140,000. This budget will be brought forward and accommodated within the existing 2009/10 Hutt River capital works budgets.

The total estimated cost for erosion protection work at Ebdentown is approximately \$1.47 million. The Flood Protection Operating Plan 2009 – 2019 provides \$735,000 in the 2009/10 financial year for Greater Wellington's share of the work. The expenditure forecast for 2009/10 is \$50,000. A rebudget of \$685,000 to 2010/11 will be proposed through the Annual Plan process, and confirmed once the NZTA approval has been received.

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### 6. Communication

There is no direct communication with the community required at this stage.

### 7. Recommendations

That the Subcommittee:

- 1. Receives the report.
- 2. *Notes* the content of the report.
- 3. **Endorses** bringing forward of \$140,000 from 2013/14 to 2009/10 to complete the urgent works at Maoribank bend, noting that the total Hutt River capital work budget for 2009/10 will not be exceeded.

Report prepared by:

Report prepared by:

Report approved by:

Jacky Cox Engineer Daya Atapattu

Team Leader, Western FMPs

**Graeme Campbell** 

Manager, Flood Protection

Jane CHEL

Report approved by:

Wayne O'Donnell

Divisional Manager,

Catchment Management

Attachment 1: Plan of Maoribank rock work and the Ebdentown rockline

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