

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Philip Drummond, Asset Engineer Rivers/Roads
REFERENCE: R503
DATE: 12 October 2006
SUBJECT: **MOTUEKA RIVER – STOP BANK REVIEW**

1 PURPOSE

The purpose of the report mailed out is to inform Engineering Services Committee on the results of the Stop-Bank Options – Pre-feasibility Report.

2 CONTENT OF THE PRE-FEASIBILITY REPORT

The report summarises initial data relating to bank heights, flood carrying capacity of the existing banks and an analysis of the structural integrity of each section of bank. An estimated ROC of about \$13M is proposed. The information is presented and clarified at the recent workshop has been incorporated.

3 PROPOSED STANDARDS

- For the right bank, Motueka side, it is proposed to develop a stop-bank that is modified to retain the existing batter slope on the outside and a 3:1 batter on the riverside to achieve 2% AEP (Q50) levels. No additional land is required on the outside. Soil treatment to achieve a high impermeability factor is required.
- For the left bank, Riwaka side, it is proposed to redevelop a bank with existing batter slopes. A thin intermittent strip of additional land is required on the river side to achieve 2% AEP (Q50) levels with no widespread soil treatment, and accepting the existing variable permeability factor.
- For the Brooklyn, both sides, it is proposed to rebuild banks with 2:1 batter slopes. To achieve 2% AEP (Q50) levels additional width is required and land owner liaison will be a key issue in developing the desirable waterway cross-section area. Soil treatment to achieve a high impermeability factor is required.

4 RECOMMENDATIONS

THAT the updated report be accepted.

Philip Drummond
Asset Engineer Rivers/Roads