



Report PE05.422
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Committee Policy, Finance and Strategy
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Tender report for Jim Cooke Park River realignment, Waikanae

1. Purpose

The purpose of this report is to:

- Report on the Jim Cooke Park River Realignment project following receipt of tenders for Contract 2247.
- Seek an increased budget approval of \$295,000 to enable the Jim Cooke Park River Realignment to proceed in the current 2005/06 financial year.
- Seek approval to award John Ray Ltd Contract 2247 for the sum of \$798,167.50.

2. Exclusion of the public

Grounds for the exclusion of the public under Section 48(1) of the Local Government Official Information and Meetings Act of 1987 are:

That the public conduct of the whole or relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists (ie. to preserve commercial confidentiality).

3. Significance of the decision

The matters 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.

4. Background

This project is one of the outcomes of the Waikanae Floodplain Management Plan adopted by Council in 1997. The project was selected as part of the preferred methods of mitigating the effects of flooding in the Nimo Ave and Te Moana Rd area of Waikanae. Provision was made for the expenditure required in the Flood Protection Operating Plan. An outline plan of the reach

is shown in **Attachment 1**. The tender under consideration in this report is for the Stage 1 works between sections ITW 270 and ITW 320.

The realignment of the river will move the active channel away from the toe of the existing stopbank giving a significantly greater level of security to the stopbank on the north bank of the Waikanae River. The stopbank prevents overflows from the Waikanae River in anything greater than a 30 year return period flood event. A failure of the stopbank would result in flooding in the Nimo Ave and Te Moana Rd areas of Waikanae initially. A major breach of the stopbank would result in some 500 houses in the Waikanae Beach area also being flooded. The damages from an overtopping or failure of the Jim Cooke Park Stopbank would be in the order of \$8.0M. The average annual flood damages saved as a result of the realignment works is estimated to be \$78,000.

The realignment of the river will be followed by the upgrade of the Jim Cooke Park Stopbank. It is hoped that the stopbank upgrade can be included in the Council's new 2006-16 LTCCP. Once the stopbank upgrade is complete the township on the north bank of the Waikanae will be protected to the 100 year flood standard.

5. Tender evaluation

Tenders were called for the works in June 2005 based on a lowest price conforming bid. Three conforming tenders were received for the contract from John Ray Ltd, Cashmore Contracting and Albert Mills Ltd. The conforming tenders received were:

John Ray Ltd	\$ 872,687.50
Albert Mills Ltd	\$ 927,840.50
Cashmore Contracting Ltd	\$1,061,323.42

All prices are exclusive of GST. Following the tender evaluation John Ray Ltd is the preferred tenderer.

The Engineers estimate for the works was \$705,820 and the budget for the works is \$540,000. A decision was made to proceed with the tender even though the Engineers estimate was above the budget because of the uncertainty of the cost of the supply of rock and the limited options to reduce the standard of the works as discussed in 6.1 below.

In addition to Albert Mills Ltd conforming tender they also submitted an alternative tender using a limestone rock source for the rip rap. The limestone does not meet the Councils specification as the specific gravity, at 2.2 tonnes per cubic meter is too light for the proposed works. By the time the volume of rock is increased to make up for the lower specific gravity and reduced abrasion resistance the like for like price would be more expensive than the John Ray Ltd tender.

The primary reason for the tender prices being above the Engineers estimate is because of the cost of the rock rip rap. The project budgets were based on rock sourced from a local quarry. The three conforming tenders however are based

on supplying volcanic rock from the Central North Island at prices ranging from 50-100% higher than budget.

The local Wellington quarry has now been closed down and more recently rock has been sourced from the Linton Quarry in Palmerston North. However, there has been a major slip at this quarry and they are now unable to start supplying rock until at least early 2006. A site visit to the quarry showed that in addition to the problem with the slips and removal of overburden they have to apply for further resource consents which may take some time to obtain. Our estimate is that it is likely to be 12-18 months before they would be able to supply any rock rip rap.

6. Options for the Jim Cooke Park realignment project

There are a range of options that can be considered for the realignment works to bring the total cost closer to the project budget.

6.1 Re design the works to a lower standard

Overall we do not believe we can make savings to the overall design without compromising either the security or the design standard. The rock groynes on the north bank are not readily able to be substituted with another design and if the volume of rock was reduced then they would not provide adequate security in a 100 year return period flood event. The rock line on the south bank below the main realignment could however be replaced with a concrete block wall of similar dimensions. This option would consist of three rows of concrete blocks with willow planting behind. The savings of using this option are estimated to be in the order of \$100,000. This type of protection has not been used in the Waikanae River in the past primarily because of the aesthetic and environmental values of the river. A variation to the resource consent would need to be sought if this option was chosen as it is a considerable change to the currently proposed protection works. In addition to this the consultation through the Waikanae Floodplain Management Plan process clearly indicated a desire to use rock rip rap rather than materials such as concrete blocks cast from waste concrete.

Overall the use of concrete blocks is not considered an acceptable alternative.

6.2 Delay the works and re tender

The main aim of this option is to delay the construction for 1-2 years and hopefully get a better price for the rock rip rap. This option would allow time for the Linton Quarry to be repaired, resource consents renewed and the required rock rip rap won from the quarry. We are unsure of the exact savings using this option as the cost of the repairs in the quarry are likely to be reflected in the new supply rate. In addition to this Horizons have a very heavy demand for the rock as a result of the February 2004 floods making it difficult for the quarry to supply sufficient quality rock to the Wellington region. It is estimated that the saving could be in the order of \$70,000 - \$90,000, based on a rock supply rate of \$55/tonne but there is considerable uncertainty about when the rock would be available and likely unit price for the rock. The Linton

quarry has always had considerable difficulty supplying rock to the required specification. The potential savings would also have to be balanced against the costs of re tendering and a likely increase in the actual construction costs which are estimated at \$10,000-\$20,000.

Demand for earthworks contractors with the plant suitable for this type of river works is still relatively high and overall prices are expected to continue to increase over time. We therefore do not see any substantial savings in re tendering the work in 12 – 24 months time.

6.3 Proceed with construction this financial year

We have reviewed the design, land and construction costs and believe we can make savings that would enable us to complete the works for a cost of \$1,036,000, or \$295,000 over the budget. We have completed a significant part of for the design and land agreements work and there is little scope for savings in these elements of the job.

We have negotiated with the preferred tenderer to reduce the construction cost of the project. John Ray Ltd are able to supply the A grade rock rip rap, the smaller of the three gradings to be used, from quarries in the Hutt Valley at a saving of \$21/tonne or \$55,000. The risk with this option is that the Hutt Valley quarries may not be able to provide all of the rock required within the current programme and construction may have to be extended into the 2006/07 summer. This is considered an acceptable risk since the rock is to be used for the protection on the south bank which, while essential for the whole alignment design, is not directly protecting the Jim Cooke Park Stopbank. In addition to the rock supply, a saving of \$11,000 can be made in the details of the groyne construction and \$8,000 in the fencing costs, giving a total saving in the tender price of \$74,000. With this saving this option presents the best approach for completing the project.

7. Financial implications

7.1 Budget

The refined total project budget based on the negotiated preferred tender price is as follows:

	Spent to date	Estimate to complete	Total estimate	Total budget
Construction/environmental	6,000	808,260	814,260	540,000
Land	-	25,000	25,000	20,000
Design/supervision	115,800	81,000	196,800	181,060
Total project cost	121,800	914,260	1,036,060	741,060

This gives a total project budget shortfall of **\$295,000**.

7.2 Funding

The additional \$295,000 would be loan funded along with the rest of the job. The impact on total rates from the increased spend would be **\$28,000** per annum for 20 years. This increased rate would be shared 50:50 between the Kapiti Coast community and regional rate payers.

As an alternative to increasing rates, the Kapiti capital works programme could be delayed to accommodate the additional expenditure. There are three major projects in Kapiti - Chrystalls Extended, South Waitohu Stopbank and house raising at Otaihanga. KCDC have made a financial contribution to advancing Chrystalls Extended and South Waitohu Stopbanks and it is not considered viable to delay them. This means we would have to delay the remaining house raising at Otaihanga for 3 years. No further work would be undertaken in that area until 2009/10, affecting approximately 16 properties, six of which were flooded in January 2005.

8. Summary

Three options have been presented for proceeding with the Jim Cooke Park river realignment being:

- Reduce the design standard
- Delay construction and re-tender the works in 12-24 months
- Proceed this financial year with an increased project budget

Of these options, proceeding with construction this financial year is considered the best option for Council. The other two options entail either significantly reducing the standard of protection or delaying the work with no real guarantee of reducing the cost. In addition to this, the Kapiti community have previously voted considerable extra funding to speed up the implementation of other areas of the Kapiti capital works programme and to delay the Jim Cooke Park works now is at odds with this desire.

9. Communication

A press release will be prepared advising the community of the committee decision.

10. Recommendations

That the Committee recommends that Council:

1. **Receive** the report.
2. **Note** the content of the report.
3. **Increase** the project budget for the Jim Cooke Park Realignment by \$295,000 in the 2005/06 financial year, to be covered by an increased loan, funded through an increase in rates starting in the 2006/07 financial year.
4. **Approve** the appointment of John Ray Limited for Contract 2247 for the sum of \$798,167.50.
5. **Requests** staff to consider, as part of the LTCCP 2006-2016 process, whether savings can be found in other areas of Flood Protection to compensate for the additional ongoing expenditure.

Report prepared by:

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Attachment 1: Plan of the Jim Cooke Park realignment