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Committee Hutt Valley Flood Management Subcommittee
Author Alistair Allan, Team Leader, FMP Implementation

Hutt River City Centre Upgrade Project - Flood protection works update

1. Purpose

To update the Subcommittee regarding aspects of the Hutt River City Centre Upgrade Project (HRCCUP) that relate specifically to the improvements to flood protection between Kennedy Good Bridge and Ewen Bridge on the Hutt River

2. Background

The aim of the flood protection component of the HRCCUP is to upgrade the existing flood protection works from Kennedy Good Bridge (KGB) to Ewen Bridge to meet the 1 in 440 year design standard including the predicted climate change impacts. The project will be designed to maintain the above design standard until the year 2100 according to current climate change predictions. The proposed works to achieve the required standard includes widening the river channel and the corridor, raising and strengthening of stopbanks and strengthening riverbanks to reduce the erosion risk.

3. Preliminary Design

The purpose of the preliminary design of the flood protection works from KGB to Ewen Bridge is to confirm the river channel widths and alignment, river berm widths, river edge protections, the stopbank height and the footprint. The river channel design will consider a range of flows from low flows contained within the active channel to the design standard flow contained within the river corridor. The river channel design will be carried out using a geomorphic engineering approach combined with conventional river engineering methods. The design will look into the instream ecology, develop methods to mitigate construction effects, and also to enhance the instream habitat.

The aim of the HRCCUP is to combine the Making Places and Melling Intersection components to deliver an integrated project from KGB to Ewen Bridge. However, there are a number of 'hot spots' where the flood works design provides the basic design information to progress with the design of other

components. These areas will be given priority in the flood works design. The areas identified at this stage are described below.

3.1 Daly Street

The preliminary design will further develop the Promenade concept at Daly Street to integrate the private sector development with the flood protection infrastructure. The purpose of the preliminary design is to provide accurate information on the form, height, placement and timing of the works at the interface.

Officers are aware that there are developers planning to apply for resource consents for private development before the completion of the Preliminary Design. HCC and GWRC officers will work with the developers to provide sufficient information in advance for them to apply for the required resource consents.

3.2 Development behind the new works at Melling

The Working Group will also investigate options for the development of land along Pharazyn/Marsden Streets, behind the proposed new works. The preliminary design will provide more accurate information on the stopbank footprint, Melling Intersection, pedestrian/cycleway bridge and car parking areas. At this stage, there is sufficient information to investigate broad planning options for this area. These options could be refined as the preliminary design develops.

3.3 Bridges

The bridges have to be designed with sufficient clearance to pass the design standard flood (that is to be high enough, wide enough and with minimal obstructions to flood flow created by the structure). The hydraulic modelling associated with the river engineering component will provide information to set the bridge soffit and waterway requirements for the new bridges that are components of other aspects of the overall project (replacement Melling Road Bridge and the proposed cycleway/pedestrian bridge).

3.4 Stormwater outlets and river corridor enhancement works

The River Engineering design will also provide parameters and flood information for the design of stormwater outfalls and environment enhancement works on the river corridor.

4. Property Required for flood protection works

4.1 Purchase

117 properties or part properties have currently been identified as required for completion of the flood protection aspects of the City Centre Upgrade Project.

The status of acquisition of these properties is summarised in the table below;

Required	Purchased	Awaiting settlement	In Valuation	In Negotiation
117	1	1	2	3

4.2 Management

Property management is currently being provided by GWRC's property managers, Jigsaw Property Consultancy Ltd.

Property management options are currently being developed to provide sufficient resource to manage all of the 117 properties required for the project once they have been purchased.

4.3 Risks

The risks associated with the current property market conditions are being monitored, and each property purchase is being tracked in relation to the preliminary estimate developed as part of the initial cost estimation exercise.

Proposed changes to the Public Works Act are expected to increase compensation entitlements, currently estimated at \$2 million.

5. The decision-making process and significance

No decision is being sought in this report.

5.1 Engagement

Engagement on this matter is unnecessary.

6. Recommendations

That the Subcommittee:

- 1. Receives the report.*
- 2. Notes the content of the report.*

Report prepared by:

Alistair Allan
Team Leader, FMP
Implementation, Flood
Protection

Report approved by:

Graeme Campbell
Manager, Flood Protection

Report approved by:

Wayne O'Donnell
General Manager, Catchment
Management