## 4. STOPBANK BETWEEN CHRISTCHURCH HOSPITAL RIVERSIDE AND THE AVON RIVER

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The purpose of this report is to get the Council's approval for the construction of a stopbank between Christchurch Hospital Riverside and the Avon River (Otakaro).

## **BACKGROUND**

Ground levels between the Hospital at Riverside and the Avon River are such that the ground floor and basement at riverside would be flooded in a 50-year event. A stop bank with a crest level of 14.8 would extend protection to a 200-year event. The average height of the new stopbank would be 400mm. Legal requirements in the Certificate of Title pertaining to the land on which the stopbank is to be built state that the erection of any buildings or constructions must be approved by Christchurch City Council.

## **RELEVANT POLICY**

Because the works are within 30m of the river they will require Resource Consent from the City Council and as parts of the works will be within 7m of the river it will also require Environment Canterbury Resource Consent. Both consents have been applied for and the City Council Resource Consent is subject to obtaining Council approval, Environment Canterbury consent has been granted.

## **PROPOSAL**

Three options were considered: Option 1 consisted of a stopbank running alongside the river. Option 2 involved a stopbank running through the grassed area adjacent the hospital and away from the river, and finally Option 3 was a concrete retaining wall running alongside the existing access road and hospital.

All Options included a short length of retaining wall at the Hospital bridge end due to limited space between river and the access road. Access for fire trucks to a hardstand adjacent the river had to be retained in any proposal.

Although the most straight forward, Option one would result in significant damage to adjacent large trees as well as forming a visual barrier between the open grass area and the river. Option 1 would also remove a large area from the flood plan.

Option 2 will result in some disruption near existing trees but could be minimised by meandering the stop bank through the grass area and incorporating means of aerating the soil and reducing compaction in the design. It would also retain most of the flood plan and views to the river.

Option 3 would have least impact on existing trees but would have the most visual impact from the hospital to the river. Option 3 would require a more significant ramp and pathway for wheelchairs and pedestrians to access the riverbank.

This is a joint project between the Canterbury District Health Board and Christchurch City Council Parks and Waterways Unit with a 50:50 cost share.

# **CONSULTATION**

Initial consultation was between the Christchurch Hospital Maintenance Engineer and Council's Water Planning Engineer. Options were presented to Christchurch Hospital Chief of Medicine, Christchurch Hospital Assistant Director of Nursing, Site Development Officer and a Landscape Architect. The preferred Option in consultation with the Hospital and Parks and Waterways is Option 2.

Discussion with Council arboriculturist has resulted in modifications to the grassed stopbank to improve aeration and relocation of the stopbank and retaining wall to minimise compaction around mature trees.

A number of other interested groups have also been advised of the project: The Friends of the Christchurch Botanic Gardens, Curators Cottage Restaurant, Civic Trust and ICON.

Recommendation: That a stopbank (Option 2) be constructed between Christchurch Hospital

Riverside and the Avon River (Otakaro).

Chairman's

**Recommendation:** That the above recommendation be adopted.