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Corporate Plan Output: New Assets – Waterways and Wetlands P 9.3.45	

The purpose of the report is to consider the acquisition of approximately $6835m^2$ of land in Templeton to provide a sustainable stormwater drainage system for the township.

This report has been referred to the Riccarton/Wigram Community Board for comment.

INTRODUCTION

This report relates to proposals for implementation of a sustainable stormwater drainage system for Templeton Township. Currently stormwater discharges via a combination of private roof water to ground soakage with remaining water to ground soakage or surface discharge.

Existing ground soakage systems experience reduced capacities due to siltation and creates localised flooding within the township. Furthermore, the current system does not have authorisation with regards to resource consent

EXISTING STORMWATER DRAINAGE

Templeton Township covers an area of approximately 65 hectares. The existing township has 12 sub-catchments as shown in Figure-1 (attached). Area 1 and Area 9 are the oldest residential areas in the catchment. Areas 2 to 8 have been developed more recently. Areas 10 to 12 represent the newest residential development.

Areas 10 to 12

Stormwater from this area is collected and discharged to a soil adsorption basin located near Johns Road. The stormwater from this area has proper authorisation.

Areas 2 to 8

In this area most properties have roof water discharging to the ground by soakage on site. Water from road is disposed of by soakage chambers within the road reserve.

Area 1 and Area 9

There is no onsite soakage facility in this area. Runoff from Area 1 is collected and delivered to an open drain. The open drain leads southwards for a few hundred metres to a soakage pit on private land.

The stormwater from Area 9 is discharged to the water race alongside Trents Road towards south. The water race is a tributary of Halswell River and unlikely to have the capacity to carry any stormwater flow from the upstream catchment.

EFFECTS CREATED BY CURRENT STORMWATER DISPOSAL

The private soakholes in the older part of the township are failing because of siltation. As a result roof water is being discharged to side channels which significantly increase stormwater flow to the public disposal system. Computer modelling result indicates that section flooding would take place under 2% AEP (50year) storm event.

Stormwater discharge from Area 2 and Area 9 is a cause of local flooding at the point of discharge. It also contributes to the peak flows in the Halswell River. It is worth noting that Halswell River catchment already has significant flooding problem. Stormwater currently discharging from area 1 to a private land is on the basis of verbal agreement, which could be terminated at any time.

LEGAL AUTHORISATION FOR STORMWATER DISPOSAL

The most recent subdivision in Templeton (Area 10 to 12) has specific resource consent to cover its stormwater discharge.

The stormwater discharge from Area 1 to Area 9 is not authorised by resource consent. As such it constitutes an illegal discharge. Any adverse environmental effect due to this unauthorised disposal would not protect Christchurch City Council from its liability.

PROPOSED STORMWATER DISPOSAL OPTION

A detailed investigation has been carried out by the consultant Pattle Delamore Partners regarding possible stormwater disposal options and their suitability. Hydrological and hydraulic modelling has also been carried out by the Water Services Unit. It is evident that stormwater disposal through a soil adsorption basin would be the most appropriate option for Templeton. It would provide a storage area for stormwater, which allows it to pass through a designed filter bed. The filtered runoff then drains down to the ground water table.

Three different soil adsorption basins are proposed for stormwater disposal in Templeton. These basins would serve approximately 90% of the total catchment. Four Direct Soakage Chambers are to be located within the areas 4,6,7 and 8 due to land constraint. A location map is shown in Figure-1.

CONCLUSION

The proposed soil adsorption basin along the Railway Terrace would cover approximately 70% of the catchment. According to the topographical characteristic of the catchment the proposed location is the most appropriate one. It is understood that the land for the proposed basin is currently owned by the Ngai Tahu Property Ltd and on the market for sale.

GENERAL

The land concerned is former railway land which has been declared surplus to its requirements and offered to Ngai Tahu Properties Limited by the Crown with the company taking up the option to acquire it. Ngai Tahu Properties Limited has subsequently offered it to the Council for sale and agreement has been reached with the company to acquire the land, subject to formal Council approval, for a retention basin. The details of the settlement are included in the public excluded section of this report.

SOURCE OF FUNDS

Waterways and Wetlands Page 9.3.45. The balance of \$321,000 will be available in the fund if this purchase and the Smacks Creek purchase are approved.

Recommendation: That 6835m² as defined on survey office plan SO9896 be acquired

from Ngai Tahu Properties Limited on the terms and conditions

outlined in the public excluded section of this report.

The above report was considered by the Riccarton/Wigram Community Board at its meeting on 1 September 1999. The Board supported the staff recommendation.

Chairman's

Recommendation: That the above recommendation be adopted.