



## STAFF REPORT

**TO:** Development Contribution Levies – Delegated Committee

**FROM:** Dugald Ley, Development Engineer

**REFERENCE:** BC070089

**SUBJECT:** **HILLS COMMUNITY CHURCH, 120-122 ARANUI ROAD, MAPUA - EP07/07/02 - Report Prepared for 10 July 2007 Hearing**

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### 1. PURPOSE

To review the process for the calculation of the Stormwater Household Unit of Demand (HUD) for the above development, ie one HUD has been requested by Council whereas the applicant does not wish to pay a HUD for stormwater.

### 2. BACKGROUND

The above application is for a new Church building of some 620 m<sup>2</sup> to replace the existing Church building of some 127 m<sup>2</sup> (i.e. approximately five times bigger). The new proposal is outlined on the attached plan with the existing building shown as the red dotted line.

The property is presently in grass and covers two legal descriptions under one title 5B/621. The development shows that 23 car parks and access areas will need to be formed on this site and the access to Aranui Road sealed to mitigate debris and gravel being tracked on to the footpath and carriageway.

### 3. DISCUSSION

The Council has no direct “pipe” infrastructure in the immediate area but it does have kerb and channel as an open channel system in Aranui Road which leads to a sump and piped system at approximately 102 Aranui Road. There is also an open swale drain to the immediate east of the applicant’s site that leads to an open channel system and thence to the estuary before out-falling to the Leisure Park causeway area and floodgates.

By virtue of the kerb and channel being in Aranui Road a stormwater disposal system is deemed to be available and connection could have been via a “bubble up sump” on kerb entries – albeit a “pressure” system from the roof would have been required. These connections are provided for and set out in the Engineering Standards 2004.

As part of their development the applicant has chosen to use soak pits rather than connect to Council’s kerb and channel system.

From experience soak pits have a three-fold problem:

- a) they fail through lack of maintenance;

- b) they cause ground water levels to rise and eventually come to the surface in a downstream property;
- c) they eventually come out at the lowest point and cause flooding problems – a situation that Council has already been asked to address with respect to the Iwa Road stormwater submissions regarding flooding.

The calculation of the HUD amount for stormwater is based on an area of 300 m<sup>2</sup> of permanent surface being equal to one HUD. In this situation the development is some five times larger than the present building. However having a building area equal to 620 m<sup>2</sup> equates to two HUDs in the LTCCP and Council have generously granted the existing 127 m<sup>2</sup> building as one HUD and therefore one HUD is attributable to the development.

This officer acknowledges the spirit of this application and the endeavour to mitigate adverse effects. To this end Council agreed to allow the access and car parking to be formed on a semi-permeable surface, i.e. gravel (much like the “Honest Lawyer” which has a surface of crushed shells).

This gravel surface may well allow infiltration of surface water in the short term but over time with compaction from vehicular traffic and silts sealing up the voids in the soak pits, it will be only a matter of time before an effect is felt downstream of the site.

#### 4. SUMMARY

It is the view of this officer that even though the applicant is proposing to discharge to ground there is:

- a) A channel system available in Aranui Road that the applicant could discharge to.
- b) Council has an item in the LTCCP downstream of the applicant’s land that is required to mitigate flooding problems from excess flooding of stormwater both over land and via ground water.
- c) The property is located in the Stormwater Urban Drainage Area and also the contribution map areas.

These maps were tabled at the Engineering Services Committee meeting on 25 February 2007. To reiterate a comment in the report, viz

*“The UDA maps indicate the extent that Council has the ability to collect and dispose of stormwater. Some methods of collection include but are not limited to – piped reticulation, open waterways, watercourses, kerb and channels and soak holes.” As with the Wastewater UDA, the Stormwater UDA includes properties that are not physically required to connect to the network. However Council’s rating fee is based on land value and thus the property as a whole is deemed to benefit from the stormwater service.*

The above maps were confirmed for inclusion into the LTCCP process by unanimous decision.

## 5. RECOMMENDATION

THAT the one household unit of demand for stormwater (presently \$1,561) be confirmed.

Dugald Ley  
**Development Engineer**

