



**Eliot Sinclair
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Our Ref: 231037

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**SUBMISSION ON CHRISTCHURCH COUNCIL DRAFT LONG TERM COUNCIL COMMUNITY
PLAN (LTCCP) 2009 - 2019**

TO:

**Freepost 178
DRAFT LTCCP
CHRISTCHURCH CITY COUNCIL
PO BOX 237
CHRISTCHURCH 8140**

FROM:

ROOKWOOD HOLDINGS LIMITED

ADDRESS FOR SERVICE:

**ELIOT SINCLAIR & PARTNERS
PO BOX 4597
CHRISTCHURCH**

ATTENTION: TRUDI BURNEY

WE OPPOSE, IN PART, THE DRAFT T LTCCP 2009 – 2019.

Rookwood Holdings Limited appreciates the opportunity to submit on the Christchurch Draft LTCCP.

WE WISH TO BE HEARD IN SUPPORT OF THIS SUBMISSION.

IF OTHER PARTIES MAKE A SIMILAR SUBMISSION WE WOULD CONSIDER PRESENTING A JOINT CASE AT A HEARING.

THE SPECIFIC AREA OF THE DRAFT LTCCP THAT OUR SUBMISSION RELATES TO IS:

Provisions in the Draft LTCCP for the management of adequate water supply and pressure in the west of Christchurch

Management of Water Supply in the west of Christchurch

The specific issue to which the submission relates is the provision for reticulated water supply in the west of Christchurch. The Draft LTCCP addresses the issues of water supply in Volume 1 pages 61-71 and page 263, Proposed Capital Programme, shows the funds budgeted and the timeframes for certain works relating to water supply. It is noted that no funds are allocated or timeframes given for upgrading existing water supplies in the west of Christchurch and no funding has been provided to meet the New Zealand Fire Fighting Code of Practice.

231037-181 Submission on LTCCP.doc

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As part of the work undertaken for the proposed re-zoning of the ex-Templeton Hospital site, zoned Special Purpose Hospital, to a business zoning we have been advised by Council staff, and subsequent design calculations show, that the existing reticulated water supply network, while having adequate water, does not have adequate water pressure. Lack of water pressure means that the ability of sites to provide water for fire fighting purposes are unlikely to comply with the New Zealand Fire Fighting Code of Practice. Discussions have been held with Council staff with regards to how our particular site can be developed to ensure that future businesses can meet the required standards. A number of options are available, these include making the affected areas 'Restricted Supply Area', upgrading of existing pipes, upgrading of existing wells and pumps, centralised storage and pumping and upgrading the Denton Park system. Each of these methods are summarised below;

1. Restricted Supply Area

Existing areas of the Council network are classed as restricted supply areas. In these areas lot owners are required to make their own onsite arrangements to secure fire fighting and normal operational water supplies from a trickle feed from the Council network. Property owners can achieve this by installing onsite water storage that fills slowly so that the flow and pressure requirements are not critical. Individual pressure pumps are needed for each property to provide adequate pressure for potable use.

The flow and pressure requirements are not met by the Council potable water supply network for either normal operational use or for fire fighting use. The available total volume could meet the requirements for a restricted supply zoning. Sufficient volumes of water can be delivered to the site to make this a viable option.

Specific City Council approval will be required for a development that would become a restricted supply zone where onsite storage is required to meet both normal operating activities and fire fighting requirements on site. This is not likely to be a preferred option by Council as alternatives are available.

2. Upgrade to the Kirk Road Main

A section of the Council network in Kirk road is 150mm dia. pipe. Removing this restriction by upgrading this to 200mm dia. pipe to match the rest of the main in Kirk Road will improve flow and pressure at the development site.

The section of 150mm dia. main in Kirk Road runs under railway lines, hence it will be more expensive to upgrade than typical water mains. This upgrade will improve pressure and flow at the site but is not, on its own, sufficient to meet requirements. This option could be carried out in conjunction with other options to improve the supply.

The Council now has a computer model of their potable water supply network and would need to advise on the level of improvement in pressure and flow this upgrade could achieve.

Note: This option would provide benefit to our site and surrounding properties but would be of little benefit to the wider community.

3. Upgrade Existing Wells and Pumps

Existing onsite bores could be used to either augment the Council potable water supply, or to run an independent network. This would require the investigation of the construction of existing bores to ensure they meet current construction standards and that the quality of the water produced meets current drinking water standards.

From investigation of Environment Canterbury's (ECan) records none of the existing onsite wells have resource consents to take water. A take of 10m³ per day for domestic use is a permitted activity under the Proposed Natural Resources Regional Plan but the site daily requirements far exceed this volume.

The development is in the Selwyn-Waimakariri groundwater recharge zone, which is considered by ECan to be over allocated. It is therefore uncertain as to whether an application to take groundwater would be approved.

Further, the existing wells may not be deep enough to reach the aquifers used for drinking water and as a result produce lower quality water not suitable for potable supply. Our understanding is that the City Council does not have any desire to add additional wells to their network in this locality.

Note: Again if this option is viable it would only benefit our site and not the wider community.

4. Centralised Storage and Pumping

Storage and pumps could be provided within the development of our site as part of the network to be vested with the City Council to balance pressures and flows at peak times. This would meet the requirements of the proposed development without the need to consider the area a restricted supply zone.

There is existing onsite storage in the form of two water towers and a large underground tank. The condition of these reservoirs and their seismic capacity is unknown and must be investigated if they are to be considered for future use.

Pumps and tanks are an ongoing operation and maintenance cost that the City Council would have to accept before they could be incorporated into the Council network. All new capital works would have to be designed and constructed to Council specifications in order for them to be vested with the City Council.

The City Council does not have a design standard that specifies onsite storage volumes for developments of this type and size.

It is of note that the existing underground storage tank is shown to have a capacity of 563,700 litres on the site plans. This is a greater volume than has been calculated for one days volume requirements for normal operation of the fully developed site. If this tank is serviceable it could potentially meet the site flow balancing requirements.

The existing underground tank appears to be capable of fulfilling the requirements of a balance tank to the development but may not have sufficient remaining service life to be taken over by the City Council as an asset.

City Council staff have indicated that incorporation of the existing storage and new pumping into the Council network is not an acceptable option. Firstly because the reservoir is unlikely to meet council infrastructure standards and secondly because additional pumps result in more complex maintenance requirements.

5. Contribution to Denton Park Upgrade

Upgrading the pumping station at Denton Park could provide the pressure and flow required to service the site and the wider area. This could be achieved by way of a targeted developer contribution to increase the pumping capacity of the Denton Park pumping station and to upgrade other critical parts of the network to meet the requirements of the site.

Initial discussions with City Council staff indicate that this could be the preferred option to provide water for the site at the required pressure and flow.

As can be seen from above there are various options that we can use to meet the New Zealand Fire Fighting Code of Practice. The issue with the majority of options is that they are site specific and while they can meet the requirements for the proposed development of the

site they do not address the issue of providing adequate fire fighting pressure to the wider area.

There are a number of areas in the west of Christchurch that are underdeveloped or are expected to be developed further, these include areas of future development identified in Proposed Change 1 to the Regional Policy Statement. It is considered that the lack of pressure in the reticulated water supply has the potential to stifle development in the west of Christchurch.

As there are existing water pressure supply issues we consider that this matter warrants serious consideration by the Christchurch City Council to address the safety considerations of providing sufficient water and pressure for fire fighting purposes. If no consideration is given this allows for an ad hoc approach for individual sites to use a variety of different and less effective options to provide onsite compliance with the New Zealand Fire Fighting Code of Practice.

As a result of our discussions with Council staff it is clear that the preferred option is to upgrade the pumping station at Denton Park. This option provides the most benefit, both in terms of providing for a greater area and number of users while also being the likely most financially cost effective.

We consider that the costs of upgrading the pumping station at Denton Park should be included in the current Draft LTCCP. By including the cost of these works in the LTCCP the City Council has the ability to adjust the Development Contributions Policy to ensure that future development in the area pays a contribution to the works required.

Providing for the upgrade of the Denton Park pumping station would result in better achievement of community outcomes, that is a safe environment (that meets the New Zealand Fire Fighting Code of Practice) and better provides for the provision of core utility services.

Therefore, the submission is in support of Council making a provision for renewals and replacements of reticulated water supply as provided in the Draft LTCCP, however, more certainty is required that some of this funding, or new funding will be included, that would be allocated to the upgrading of the Denton Park pumping station.

Relief sought

On the basis of the above submission it is sought that:

- Review of the suitability of the Denton Park water supply, specifically in relation to the ability to provide adequate pressure to meet the New Zealand Fire Fighting Code of Practice requirements;
- The review should include matters of growth in the west Christchurch area and therefore increased demand on the Denton Park system;
- Review of the Development Contributions Policy with the aim to include the costs, or a part portion of costs, of the Denton Park upgrading in the contributions payable for development in the area.

SIGNED (ON BEHALF OF THE APPLICANT)



DATE

09/04/09