

TO: City Planning

FROM: Consents & Compliance Officer, Water and Waste Group

DATE: 06 December 2017

LUC-2017-561 CONVERT INDUSTRIAL TO RESIDENTIAL

SUBJECT: **5 CLARK STREET, DUNEDIN**

THREE WATERS COMMENTS

1. The proposed activity

Landuse consent is sought from DCC to establish a residential activity in an industrial building at 5 Clark Street, Dunedin. The site is within the Industrial zone.

The applicant proposes to establish a seven bedroom apartment on the ground floor of a building, and reconfigure the three existing apartments on the first floor of that building. Residential activity is to occupy the entire building, with the number of residential units increased from 3 to 4 and the total number of habitable rooms increased from 7 to 15. The proposal is a non-complying activity as residential activity is not provided for as a permitted activity in the Industrial zone. The site borders the Residential 4 zone.

Existing services

The DCC's GIS records a 100mm diameter water pipe and 150mm diameter wastewater pipe in Clark Street.

Density assessment

The Industrial zone does not allow for residential development, this area will still be Industrial zone in the Second Generation District Plan. The adjacent Residential 4 zone permits a density of 1 unit per 200m², so if this site was in this zone, 2 units would be allowed (site is 525m²). Inner city residential in the 2GP (which the adjacent zone will become) allows 1 habitable room per 45m². This site would allow 11 rooms if it was under that zoning (so it would be overdense under this criteria also).

2. Assessment of effects on 3 waters infrastructure

The DCC has hydraulic models for many of the City's water, wastewater and stormwater networks. The effect of new development on those networks can be evaluated against current performance, and against foreseeable future demand. The Water and Waste Group Hydraulic Modeller has assessed this application as described below.

Water

No issues have been identified with supplying water or fire flows to this development.

Wastewater

No issues have been identified with accommodating wastewater drainage from this development.

It is assumed residential flows will be less than allowable industrial flows.

Stormwater

A stormwater ICMP is available for this area. The site is currently 100% impermeable. Flooding is predicted the area downstream.

Conclusion

Granting of this consent will have minor to no effect on the DCC three waters networks, however the applicant is encouraged to utilise water saving devices, including but not limited to, low-flow shower heads, 6/3 dual flush toilets and aerated sink mixers.

3. Infrastructure requirements

Standard of installation

All aspects of this development shall be in accordance with the requirements of the Dunedin Code of Subdivision and Development 2010.

Water services

The Dunedin City Council Water Bylaw 2008 (revised 2011) sets out the requirements for connections to the water supply network. This property is currently serviced for water via a 20mm standard domestic connection.

The applicant is advised that a larger water connection will be required to adequately cater for 4 units/15 habitable rooms to get a consistent flow of water. A larger connection will require a water meter and backflow prevention device. The backflow prevention device and proposed location will be assessed as part of the building consent associated with the internal upgrade of the building.

Any change to an existing water connection will require an "Application for Water Supply".

Firefighting requirements

All aspects relating to the availability of water for firefighting should be in accordance with SNZ PAS 4509:2008, being the Fire Service Code of Practice for Fire Fighting Water Supplies.

There is a Fire Hydrant (WFH02810) 40 metres from the development entrance. Based on SNZ PAS 4509:2008 a W3 (25l/s) zone requires a Fire Hydrant within 135 m and a second within 270 m. These Fire Hydrants requirements are compliant for the development.

4. Consent conditions

The following conditions should be imposed on any resource consent granted:

Water services

1. An "Application for Water Supply" shall be submitted to the Water and Waste Group for approval to establish an upsized water connection to the property. Details of how the property is to be serviced for water shall accompany the "Application for Water Supply".
2. An RPZ boundary backflow prevention device shall be installed on the upsized water connection, to the satisfaction of the Dunedin City Council Water Bylaw Compliance Officer (refer to advice note).
3. A water meter is required on the upsized water connection to the property.

5. Advice notes

The following advice notes may be helpful for any resource consent granted:

Code of Subdivision & Development

- All aspects of this development shall be compliant with Parts 4, 5 and 6 of the Dunedin Code of Subdivision and Development 2010.

Water services

- Detail of the water supply application process can be found at <http://www.dunedin.govt.nz/services/water-supply/new-water-connections>.
- Installation of a boundary backflow prevention device requires a building consent, or an exemption from a building consent. Further information is available at <http://www.dunedin.govt.nz/services/water-supply/backflow>.

- All aspects relating to the availability of water for fire-fighting should be in accordance with SNZ PAS 4509:2008, being the Fire Service Code of Practice for Fire Fighting Water Supplies, unless otherwise approved by the New Zealand Fire Service.

Low flow devices

- The consent holder is encouraged to implement water saving devices, including but not limited to, low-flow shower heads, 6/3 dual flush toilets and aerated sink mixers, to reduce water consumption and therefore the volume of wastewater generated.

Private drainage matters

- Private drainage issues and requirements (including any necessary works) are to be addressed via the Building Consent process.
- Certain requirements for building on this site may be stipulated via the building consent process and are likely to include the following points:
 - Stormwater from driveways, sealed areas and drain coils is not to create a nuisance on any adjoining properties.
 - Surface water is not to create a nuisance on any adjoining properties.
 - For secondary flow paths, the finished floor level shall be set at the height of the secondary flow plus an allowance for free board.
 - As required by the New Zealand Building Code E1.3.2, surface water resulting from an event having a 2% probability of occurring annually, shall not enter dwellings. The finished floor level shall be set accordingly.

Consents & Compliance Officer

Three Waters

Dunedin City Council

CC: Development Engineer
Water Bylaw Compliance Officer
Customer Accounts Officer

Hydraulic Modeller
Quality Inspector
Technical Support Officer, Building Services