DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

Memorandum

TO: Connor Marner, Planner

FROM: Grant Fisher, Planner/Engineer Transport

DATE: 19 September 2017

SUBJECT: **LUC-2006-370735/A**

15 DARNELL STREET, DUNEDIN

Application: Consent is sought for a variation to the above consent with authorised establishment of a dwelling at 15 Darnell Street, Dunedin.

Access: The original consent contained two conditions relating to vehicle access for the proposed dwelling:

- The vehicle access shall be designed to minimise longitudinal gradients.
- The maximum change in gradient without transition shall be no greater than 8°.

It is understood that Transport is largely constrained to assessing these conditions with respect to the changes proposed by the variation to the consent, though there may be enforcement action that is warranted for these conditions.

With regard to the first condition, above, Transport is not aware of any specific vehicle access design that has been undertaken to satisfy this consent condition, and we note that the vehicle access within the Darnell Street legal road corridor is very steep in places. We consider it would be useful to provide guidance on an appropriate standard to apply to design of the access.

As the DCC maintains approximately the first 90m of Darnell Street from Highcliff Road, Transport considers the remainder of the vehicle access formation within Darnell Street to be a privately maintained domestic vehicle access within legal road. This privately maintained section of vehicle access is generally considered to be the primary subject of the original application and consent conditions.

AS/NZS 2890.1 provides comprehensive engineering guidance for the design of domestic vehicle accesses. In particular, Clause 6.2.6 of this standard states that the maximum gradient of domestic vehicle accesses shall be 1V:4H (25%). However, there is also an additional notation to this clause that states:

> "It is recognised that limiting domestic driveway grades to 25 percent maximum may not be practicable in some particularly hilly residential locations. The services of a professionally qualified person with appropriate experience may be required to make a judgement as to whether a particular grade line design is safe and environmentally sustainable."

Transport therefore recommends that this consent condition be amended to "The vehicle access shall be designed to minimise longitudinal gradients. Detailed design plans for the vehicle access shall be submitted to, and approved by, the DCC Transport Group. The design shall be prepared by a suitably qualified professional, and shall be generally in accordance with AS/NZS 2890.1:2004, Clause 2.6.2. The

vehicle access shall be upgraded in accordance with the approved plans within 3 months of the consent being given effect to".

Transport considers that the above amendment provides clearer guidance in relation to the design expectations of the original consent condition, and therefore considers the amendment to be reasonable given the steep gradient of the vehicle access to the site. However, if the planner considers the amendment to be outside the scope of the original consent condition, it is noted that Transport can still rely on Roading Bylaw 11.11 to require such detailed design information to be submitted for approval, to ensure the acceptable construction of vehicle access to the site.

With regard to the second condition, above, is should be noted that this does not relate to the maximum gradient of the vehicle access as contended by the submitter. Instead, it relates to the maximum *change* of gradient along the vehicle access. This requirement essentially helps prevent vehicles scraping on the surface of the vehicle access due to entry and departure angles of the design vehicle. Transport considers that this design requirement can be addressed through the detailed design requirements outlined above.

Parking/Manoeuvring: There is considered to be ample space within the site to cater for the on-site parking and manoeuvring needs of the proposed activity.

Conclusion: Transport considers the proposed variation to be in general accordance with the transport-related effects of the original consent, subject to the following:

Conditions:

(i) The vehicle access shall be designed to minimise longitudinal gradients. Detailed design plans for the vehicle access shall be submitted to, and approved by, the DCC Transport Group. The design shall be prepared by a suitably qualified professional, and shall be generally in accordance with AS/NZS 2890.1:2004, Clause 2.6.2. The vehicle access shall be upgraded in accordance with the approved plans within 3 months of the consent being given effect to.

(ii) The maximum change in gradient without transition shall be no greater than 8°.

Grant Fisher
Planner/Engineer
Transport