AND

IN THE MATTER OF

of Resource Consents and Notices of Requirement for the Central Interceptor main project works under the Auckland Council District Plan (Auckland City Isthmus and Manukau Sections), the Auckland Council Regional Plans: Air, Land and Water; Sediment Control; and Coastal, and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

SUPPLEMENTARY STATEMENT OF EVIDENCE OF LEO DONALD HILLS ON BEHALF OF WATERCARE SERVICES LIMITED

TRAFFIC

1. INTRODUCTION

Qualifications and experience

- 1.1 My name is Leo Hills. My qualifications and experience are set out in my primary statement of evidence.
- 1.2 I confirm that I have reviewed, and agree to comply with, the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note (2011).

Scope of this supplementary evidence

1.3 The purpose of this supplementary evidence is to comment on the revised proposal for construction access to the May Road primary construction site. Instead of using the access from Roma Road for two-way construction access, Watercare has amended its proposal for access to the site and now proposes to operate a one-way access system during construction using an additional access to May Road.

1.4 I commented on this option, very briefly, at paragraphs 5.76 - 5.78 of my primary evidence. Now that Watercare has committed to a one-way system, I have prepared this brief statement to provide further comment.

2. ACCESS TO THE MAY ROAD SITE

- 2.1 My primary evidence assesses two-way vehicle access from Roma Road into the May Road site.¹ This option utilises an existing legal access for the property. I also set out the traffic management and signal measures proposed to enable the safe operation of this two-way system. I concluded, and maintain the opinion that, this is a feasible option.
- 2.2 Watercare has very recently obtained a licence agreement with the owner of the property at 105 and 105A 109A May Road which enables an alternative access direct to May Road. This agreement allows Watercare to access its site from May Road during the construction period. At the time of filing my primary evidence, this alternative was still being considered and developed, and for that reason, I only provided brief comment in my evidence that I had no traffic or transportation issues with this alternative and it could work well from a construction perspective.²

Proposed one-way circulation

- 2.3 Since my primary evidence was filed, Watercare has agreed to commit to construct two accesses and operate with one-way circulation during construction.
- 2.4 I have assessed this revised proposal and can confirm that one-way access during construction is achievable, subject to the detailed design process. It would also avoid the need for the traffic management and signal measures as set out in my primary evidence.³
- 2.5 With two access points, there are two options for the one-way circulation:
 - (a) entry off Roma Road and exit onto May Road; or
 - (b) entry off May Road and exit onto Roma Road.

At paragraphs 5.70 to 5.75 of my primary evidence.

At paragraph 5.78 of my primary evidence.

At paragraph 5.73 of my primary evidence.

- 2.6 I have considered both these options. While both options are feasible from a traffic management and operational perspective, in my opinion, the preferred direction is for vehicles to enter via Roma Road and exit via a left turn onto May Road. This is because:
 - (a) The existing right turn bay at the May Road/Roma Road intersection will allow vehicles to easily turn into Roma Road and therefore access the site. This turn bay is currently used by a number of trucks already accessing Roma Road and previous road safety assessment suggests that there are no inherent safety issues with this intersection. If the entrance was from May Road, a new flush median or right turn bay would need to be constructed. This would require removal of a significant length of on-street parking (at least 140m) and modification of the local road network to accommodate the bay or median.
 - (b) A left turn exit out onto May Road will allow vehicles to easily exit the site.
 - (c) All heavy vehicle movements at the construction driveways would be left turn only, whereas the other direction would involve the more difficult (and potentially less safe, although still feasible) right turns at the two access points.

Location of the new access road

- 2.7 Watercare has negotiated the ability to use one of two options for access to May Road (shown on Drawing SK_1500 in **Appendix L** of Ms Petersen's supplementary evidence):
 - (a) Option 1 runs between existing buildings on 105 109A May Road, approximately 22m south of the boundary between 105 - 109A May Road and 101 - 103 May Road (Gilmours).
 - (b) Option 2 is located closer to the boundary with Foodstuffs' property and the existing Gilmours driveway and is approximately 6m south of the same boundary.
- 2.8 In my opinion, Option 1 is the preferred option:
 - (a) Option 1 ensures greater separation between the access road and the existing Gilmours driveway.

- (b) It is located on an existing access way that is already of a sufficient width to enable vehicles to turn out onto May Road.
- (c) This option would only require minor modifications to the May Road exit including removing street parking immediately next to the exit and modifying the splay taper.
- 2.9 In comparison, Option 2 would require a new driveway to be constructed that is wide enough to facilitate turns out of the access road. This creates an additional access point/driveway on May Road in close proximity to both the Gilmours driveway and the existing (Option 1) driveway. Having a number of driveways closely spaced on an Arterial Road, such as May Road, is not desirable from a traffic safety and efficiency point of view, or for pedestrian safety reasons.
- 2.10 However, despite my preference for Option 1, both options are feasible from a traffic management perspective and available to Watercare under its legal arrangements.

Two-way access from May Road

- 2.11 I understand that Foodstuffs may not be satisfied with the proposed one-way circulation. I have therefore also considered the option of two-way access from May Road, with no access from Roma Road. In my opinion, this would be inferior to the option of one-way circulation. This is because:
 - (a) Two-way access from May Road utilising the existing driveway width (for either location on May Road), would require the same signal operation management as proposed previously for the two-way Roma Road option.⁴ This would, however, have the following disadvantages over the two-way Roma Road option:
 - (i) Trucks turning into the site would do so via a right turn and as such may need to wait in the middle of May Road if another vehicle was exiting the site.
 - (ii) May Road is a District Arterial Road (as opposed to Roma Road being a Local Road) and experiences considerably greater traffic volumes than Roma Road (measured in August 2011 as 1,400 vehicles per hour on May Road vs

As set out in paragraph 5.73 of my primary evidence.

- 242 vehicles per hour on Roma Road in the evening commuter peak period).
- (b) One of the driveways on May Road would need to be widened to accommodate two-way flows at the same time. To accommodate the two-way truck flow shown in Drawing C of **Attachment E**, I have calculated (based on vehicle tracking) that:
 - (i) the driveway would need to be widened at the site boundary from the current width of 7m to approximately 10m; and
 - (ii) the footpath crossing distance (located at the kerb edge) would need to be widened from 8.5m to over 18m to accommodate two-way movement.
- (c) I consider this crossing width to be excessive and would have a significant effect on pedestrian safety.
- (d) The two-way May Road option would concentrate all movements to one access point on an arterial road whereas the one-way option distributes the traffic generated to two different roads, including one industrial local road.

Other points to note

- 2.12 Three final points I note for completeness are:
 - (a) A one-way circulation system would not result in any change to the assessment of effects on the wider transport network.
 - (b) The truck tracking curves for the three options discussed above are included in **Attachment E**.
 - (c) The permanent access to the site will be from Roma Road and, as a result, this access will need to be constructed regardless of whether it is utilised during construction.

3. CONDITIONS PROPOSED

3.1 To reflect the amended access proposal to the May Road site, Watercare has proposed to include the following additional condition on the designation (TM.3D):

Access for heavy vehicles to the proposed May Road site during construction shall be via a one way system utilising the proposed Roma Road access and an additional access direct from May Road via land at 105A – 109A May Road legally described as Lot 1 DP 58697, subject to agreement with the owner of that land and to any other approvals required from Auckland Transport. The proposed direction for the one way system, and the design of the access roads and vehicle crossings, shall be set out in the Traffic Management Plan and Outline Plan of Works for the site submitted in accordance with Conditions DC.5, DC.7, TM.1 and TM.2.

3.2 I support this proposed additional condition.

Leo Donald Hills

29 July 2013