

**BEFORE THE QUEENSTOWN LAKES DISTRICT COUNCIL  
INDEPENDENT HEARINGS PANEL**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of submissions to the Stage 1 Proposed  
Queenstown Lakes District Council Plan  
by **Hogans Gully Farm Limited (Submitter  
2313)**.

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**STATEMENT OF EVIDENCE OF ADAM VAIL  
ON BEHALF OF HOGANS GULLY FARM LIMITED  
TOPIC 14: WAKATIPU BASIN LAND USE VARIATION**

**13 June 2018**

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## **1.0 Introduction**

- 1.1 My name is Adam Vail. I am an experienced three waters land development Civil Engineer. I hold an Associate of Applied Science degree in Civil Engineering and Surveying Technology (1998), North Dakota, USA and a Bachelor of Science degree in Civil Engineering from North Dakota State University (2006), North Dakota, USA.
- 1.2 Engineering New Zealand Member, CMENGNZ, Registration number 1158345, Since 2017.
- 1.3 Chartered Professional Engineer, CPEng, Registration number 1158345, Since 2018.
- 1.4 Registered Professional Engineer, State of Colorado, USA, No. 41806, Since 2008.
- 1.5 Registered Professional Engineer, State of Hawaii, USA, No. PE-14053, Since 2010.
- 1.6 I have been working in the Civil Engineering and Surveying field for over twenty years. I have design experience in three waters land development projects.
- 1.7 Since July 2017, I have been working as a Senior Project Engineer with Holmes Consulting in Queenstown.
- 1.8 I confirm I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014, and agree to comply with it. I can confirm that this evidence is within my area of expertise, except where I state that I have relied on material produced by other parties, and that I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## **2.0 Involvement in Project:**

- 2.1 Holmes Consulting has been engaged by the land owners, Hogans Gully Farming Limited, to provide an infrastructure assessment relating to the proposed zone change identified in their Submission, 2313.
- 2.2 In preparing this evidence I have reviewed the following documents or reports relevant to my area of expertise:
- (a) The Infrastructure Evidence of Mr Vaughn Michael Crowther
  - (b) QLDC Provisioning Letter, Dated 6 December 2017
- 2.3 I have prepared my evidence based on my:

- (a) Expertise as a three waters land development Civil Engineer,
- (b) Familiarity with the application site and surrounding area, and
- (c) Familiarity with the above mentioned documents.

### **3.0 Scope of evidence**

3.1 My evidence addresses the following matters:

- (a) Water Supply Capacity, and
- (b) Servicing costs

### **4.0 Submission**

4.1 The Submissions request the inclusion of a new Hogans Gully Special Zone or an alternative Residential Precinct within the proposed Wakatipu Basin Rural Amenity Zone. The Submission for the proposed Hogans Gully Special Zone would allow for the development of a golf course and associated visitor accommodation and residential land uses.

### **5.0 Infrastructure Evidence – Mr Vaughn Michael Crowther**

5.1 I have reviewed the Infrastructure Evidence of Mr. Vaughn Michael Crowther.

5.2 Mr Crowther reviewed the wastewater, stormwater and water infrastructure assessment report (2018) prepared by Holmes Consulting. Within his report he appears to be satisfied with the assessment of the wastewater and stormwater assets for the development. The focus of his evidence is around water assets and I have tailored my response to address his concerns.

5.3 The Holmes Consulting infrastructure assessment report (2018) indicates there are two options to provide water to service the development.

5.4 Option 1, envisions a connection to the Arrowtown Scheme that requires an extension and upgrade to the existing pipe network, headwork improvements and a booster pump to service the development.

5.5 Option 2, envisions a trickle fed water supply, to an ancillary reservoir, with a reticulated network and a booster pump to service the development.

5.6 Mr. Crowther opposes the submission on the grounds there is insufficient capacity with the Council's water scheme to service the development and stating there are no planned upgrades.

5.7 In response to Mr. Crowther's capacity concerns, I refer to a provisioning letter from QLDC, dated 6 December 2017, stating "It is possible for QLDC to provide wastewater and water supply services

to the proposed Hogans Gully Farm development with the provision of financial contributions to the required network upgrades.” Additionally, the letter states “Significant upgrades to the Arrowtown water supply scheme are being planned by QLDC....The extent of QLDCs planned upgrades is not currently defined, but would involve pipe network upgrades, a new bore pump and additional storage.”

- 5.8 QLDC’s provisioning letter indicates it is possible for QLDC to provide water supply services and there are planned upgrades to involve pipe networks, a new bore pump and additional storage. Hogans Gully Farm would be required to contribute to these upgrades if connecting to the Councils network. The applicant would also need to extend the pipeline along McDonnell Road at their own cost to the developments boundary. This letter has helped form the basis of our assessment.
- 5.9 Mr. Crowther also opposes the submission on the grounds there is no evidence that the development, will not generate additional servicing costs that fall on the wider community.
- 5.10 Holmes Consulting’s infrastructure analysis report (2018) omitted that it is envisioned that the reticulated water network, booster pump, and optional ancillary reservoir located within the development boundary and will be retained in private ownership.

## **6.0 Conclusion**

- 6.1 I consider it feasible to supply water to the proposed development and to limit the generation of additional servicing costs to the wider community.

**Adam Vail**

**13<sup>th</sup> June 2018**

**Appendix A – QLDC Provisioning Letter, dated 6 December 2017**



6 December 2017

File:  
Your Ref: 171106HOGANGULLY

Dear Adam Vail,

Please find attached wastewater and water modelling reports for the proposed Hogan Gully Farm development.

### **Wastewater**

The wastewater modelling for 3 connection options shows that manholes downstream of the proposed Hogan Gully Farm development will all overflow in their current capacities. With QLDC planned wastewater scheme upgrades in the area further network upgrades for Option A and B connections would be required if the Hogan Gully Farm development was to connect to the QLDC network. Option C connection would not require additional network upgrades other than those planned by QLDC.

### **Water Supply**

Water supply modelling results show that the proposed Hogan Gully Farm development would have considerable impact on the existing Arrowtown water supply scheme. Significant upgrades to the Arrowtown water supply scheme are being planned by QLDC and the Hogan Gully Farm development would be required to contribute to these upgrades if connecting to the QLDC network. The extent of QLDCs planned upgrades is not currently defined, but would involve pipe network upgrades, a new bore pump and additional storage. To allow connection of the Hogan Gully Farm development to the Arrowtown scheme would require the minimum additional upgrades of a 200mm pipeline along McDonnell Road and approximately 400 – 600 m<sup>3</sup> of additional storage. Further modelling to incorporate QLDCs proposed upgrades and additional demand from Hogan Gully Farm will be completed by QLDC in the near future. Similarly QLDC will be looking at proposed upgrades to the Lake Hayes water supply scheme and supply to Hogan Gully Farm.

In summary, it is possible for QLDC to provide wastewater and water supply services to the proposed Hogan Gully Farm development with the provision of financial contributions to required network upgrades.

Yours sincerely



Andrew Tipene  
Infrastructure Development Engineer.