

Before the Hearings Panel
at Central Otago District Council

under: the Resource Management Act 1991

in the matter of: Submissions and further submissions in relation to Plan
Change 19 of the Central Otago District Plan

and: **AF King & Sons Ltd**
Submitter 83

Evidence of Nick Fuller regarding **Lots 1-4 DP 444910** (5A
Lowburn Valley Road) rezoning request (Transport)

Dated: 16 May 2023

EVIDENCE OF NICK FULLER REGARDING LOTS 1-4 DP 444910 (5A LOWBURN VALLEY ROAD)

INTRODUCTION

- 1 My full name is Nicholas Peter Fuller.
- 2 I am a Principal Transport Engineer at Novo Group Limited and have worked on resource management transport planning and engineering projects for over 20 years. My experience during this time includes development planning, preparing Traffic and Transport Assessments for resource consents, preparation of Project Feasibility and Scheme Assessment Reports for Council's and the New Zealand Transport Agency.
- 3 My qualifications include a Bachelor of Engineering (Honours) in Civil Engineering.

CODE OF CONDUCT

- 4 Although this is not an Environment Court hearing, I note that in preparing my evidence I have reviewed the Code of Conduct for Expert Witnesses contained in Part 7 of the Environment Court Practice Note 2023. I have complied with it in preparing my evidence. I confirm that the issues addressed in this statement of evidence are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 5 This evidence supports the rezoning of Lots 1-4 DP 444910 (5A Lowburn Valley Road) (the *Site*) as part of the Central Otago District Council's Plan Change 19. Plan Change 19 as notified intended that the site would retain its Rural Residential Resource Area zoning. Southern Planning Group, on behalf of A F King and Sons Limited submitted that the site be zoned as Large Lot Residential Zone – Precinct 2.
- 6 The Site location is illustrated in **Figure 1**.
- 7 My evidence relates to the transport effects of rezoning this land as sought by the Submitter.



Figure 1: Site Location

SUMMARY OF EVIDENCE

- 8 As an overview of my evidence, I consider that:
- 8.1 The Central Otago District Plan transport standards can be complied with for the sought zoning;
 - 8.2 Satisfactory access can be achieved to this Site, including the provision of a cul-de-sac road at the time of subdivision (if required); and
 - 8.3 The off-site traffic effects are acceptable.

EVIDENCE

Existing Transport Network

- 9 The following section sets out the key elements of the transport network in the vicinity of the Site.
- Lowburn Valley Road**
- 10 Lowburn Valley Road runs in a broadly north-west to south-east direction in the vicinity of the Site. **Table 1** sets out a summary of the transport details of this road.

Table 1: Lowburn Valley Road

Key Feature or Characteristic	Comment
Road Classification	Rural Collector Road.
Cross-section Description	Carriageway of approximately 6.7m wide with grass shoulder on the western side and gravel shoulder on the eastern side. Road corridor of 21m.
Traffic Volumes	600 vehicles per day (vpd) ¹ , with an estimated 60 to 90 vehicles per hour (vph).
Speed	60km/h speed limit & mean operating speed of 56km/h.
Cycle / Pedestrian Facilities	None provided.

State Highway 6 (Luggate-Cromwell Road)

- 11 State Highway 6 (SH6) runs in a broadly south-west to north-east direction in the vicinity of the Site. **Table 2** sets out a summary of the transport details of this road.

Table 2: State Highway 6

Key Feature or Characteristic	Comment
Road Classification	Rural State Highway & Arterial Road
Cross-section Description	Carriageway of approximately 7.0m wide with 0.5m sealed shoulders. Road corridor of 35m.
Traffic Volumes	6,000 vehicles per day ² , with an estimated 600 to 900 vehicles per hour.
Speed	100km/h speed limit & mean operating speed of 92km/h
Cycle / Pedestrian Facilities	Gravel path on the eastern side of the road, which is identified as a Grade 1 cycle trail (suitable for novices and families) on the Lake Dunstan Trails map. This leads to Cromwell, which is 5.5km to 6.5km to the south (depending on the destination).

Lowburn Valley Road / SH6 Intersection

- 12 The Lowburn Valley Road / SH6 intersection is give-way controlled, with SH6 having the priority. This is illustrated in **Figure 2**.
- 13 The sight distance at this intersection is at least 285m in both directions, which is greater than the minimum requirement of the Austroads road design guide³.

¹ From Mobile Road website, which is based on RAMM data.

² From Waka Kotahi State Highway counts.

³ Guide to Road Design Part 4A: Unsignalised and Signalised Intersections.



Figure 2: Lowburn Valley Road / SH6 Intersection Layout

Site Access / Lowburn Valley Road Intersection Arrangement

- 14 The Site Access / Lowburn Valley Road intersection provides priority to Lowburn Valley Road. The visibility to the north out of this access is at least 151m, which is sufficient to comply with the sight distance requirements of Austroads. The visibility to the south is approximately 56m and this is to the SH6 intersection. This is considered sufficient given vehicles need to slow and turn into Lowburn Valley Road at that location.

Crash History

- 15 The Waka Kotahi (NZ Transport Agency) Crash Analysis System has been reviewed to identify reported crashes within 60m of the access intersection with Lowburn Valley Road and within 100m of the Lowburn Valley Road / SH6 intersection. This review was of the most recent five-year period available (01/01/2018 to 01/01/2023).
- 16 **Figure 3** illustrates the crash history, which indicates there has been one Serious crash reported within the review parameters. This crash occurred when a driver turning right out of Lowburn Valley Road failed to give-way to a northbound vehicle on SH6. There is no immediately apparent reason for this crash, as there is ample sight distance out of the intersection to see oncoming traffic. It was noted in the Police report that alcohol was suspected as a contributing factor to the crash.



Figure 3: Crash History

Proposed Rezoning & Effects

- 17 The *Large Lot Residential – Precinct 2* zoning sought by the Submitter would enable 18 residential units to be established at the Site based on advice from Mr Dent taking into consideration the total site area and a 30% reduction for roads and infrastructure services. This generates 25 vehicle movements per hour and 182 vehicle movements per day, based on 85th percentile traffic generation rates for Rural Residential contained in NZ Transport Agency Research Report 453 – *Trips and Parking Related to Land Use*⁴.
- 18 The majority of traffic generated by the Site is anticipated to head to / from Cromwell (i.e. south) of the Site).

Transport Effects - On-Site Matters

- 19 Although a development plan has not been prepared as yet, I consider that the Site could be developed in a manner consistent with the Transport Standards of the District Plan. As such, no specific transport rules are considered necessary to address the internal layout of the Site.
- 20 I also note that the access leg is currently within a 20m wide corridor. The Central Otago District Plan (by way of the Subdivision Code of Practice) requires a 12m wide corridor for a Local Road cul-

⁴ 1.4 vehicle movements per dwelling during the peaks and 10.1 vehicle movements per dwelling per day.

de-sac serving up to 20 dwellings. As such, there is more than sufficient width in the access to provide satisfactory access to Lowburn Valley Road.

Transport Effects - Off-Site Matters

- 21 I consider the existing access to Lowburn Valley Road to be acceptable to serve the proposed rezoning. The access is approximately 60m from the SH6 / Lowburn Valley Road intersection (measured centre to centre) and there is sufficient visibility to see oncoming traffic and identify safe gaps for turning. The traffic volumes passing the access are sufficiently low that traffic will be able to satisfactorily enter / exit the Access.
- 22 Similar to the above, I consider the traffic effects at the SH6 / Lowburn Valley Road intersection to be acceptable. The additional traffic generated by the proposed rezoning is not significant and would be within the capacity of this intersection. Although a Serious crash was reported at the SH6 / Lowburn Valley Road intersection, this appears to be a result of driver error as there is ample visibility when turning out of Lowburn Valley Road to avoid oncoming traffic.
- 23 I also understand there are two further submissions seeking rezoning, which are Lowburn Viticulture Ltd (potentially 13 Lots) and Lakeside Christian Centre (potentially eight Lots). These Lots would generate an additional 29 vehicle movements per hour in the peak hours and 212 vehicle movements per day. This leads to an overall increase in traffic volumes of at the SH6 / Lowburn Valley Road intersection of 54 vehicles during the peak hour when also including the site at 5A Lowburn Valley Road. However, this increase is less than one vehicle per minute on average during the peak hour and I still consider that it can be accommodated by the surrounding road environment.

CONCLUSION

- 24 Given the above, I consider that the rezoning of the Site to *Large Lot Residential – Precinct 2* will have acceptable traffic effects.

Dated: 16 May 2023



Nick Fuller