James Dicey for QLDC: Summary of Evidence, Streams 17 and 18 - Topic: Viticulture

- 1. I have provided viticulture evidence on rezoning Submissions 3349¹, 3357², 31037³ and 31039⁴ as they are located in (or partly in) the Gibbston Character Zone (**GCZ**). I consider the viticulture attributes of the GCZ and assess the productive potential and viticulture viability of the sites. I also consider the economic viability of the sites from a viticulture perspective, and the potential effects of the land use changes both on viticulture activities and on the nearby sites also zoned for viticulture activities.
- I conclude that grape vines can be successfully cultivated in the GCZ and at economic levels on sites 3349, 3357 and 31039 but not at the 31037 (Gibbston Valley Station Limited) site.
- 3. The 3349, 3357 and 31039 submission sites receive sufficient accumulated heat (measured as Growing Degree Days) to ripen fruit. The frost risks on these sites should be able to be sufficiently mitigated in all but the heaviest frost. The soils are suitable for viticulture and the use of grafted rootstock with new clones will enable the vines to yield at economic levels, achieve full ripeness and create distinctive and high quality wines.
- I consider that the yields on these sites when considered purely as a contract grape growing activity will generate a positive return in the majority of scenarios. I also consider that the location of the sites in the GCZ lends itself to capturing additional value using proven business models, particularly direct to consumer and additional tourist activities.
- 5. The 31037 site does not share the same characteristics, particularly lower growing degree days, increased frost risk/damaging winds and rainfall levels. This would, in my opinion, result in lower yields which would reduce the economic viability of the site (particularly when considered with the smaller size of the productive area).
- 6. It should be noted that the evidence has been prepared based on both the data available to me and my experience of the GCZ. For completeness the

¹ Cardrona Cattle Company Limited.

² The Station at Waitiri Limited.

³ Gibbston Valley Station Limited.

⁴ Cardrona Cattle Company Limited.

limitations of this should be noted, specifically the fact that the climatic and soil data is sourced from the Grow Otago resource. The climate component of this resource was created using limited data points and mathematically interpolated. Additional data from appropriately sited weather stations could be sourced to definitively conclude on suitability for viticulture and would be normal practice prior to developing land, as would undertaking detailed on site soil analysis. My evidence was also prepared prior to the country's lockdown in response to Covid-19, but my views have not changed, particularly given that the life of the district plan is at least ten years and the appropriate zoning needs to be considered with that timeframe in mind.

- 7. In my opinion the conversion of the sites to Rural Visitor or General Industrial Zone will result in the loss of productive viticulture land.
- 8. I also consider that the rezoning could result in reverse sensitivity effects in relation to noise, spray drift and staff activity (particularly if located next to residential activities within either the Rural Visitor or General Industrial zone).
- 9. It should also be noted that the industrial activities (including the Victoria Flats Landfill) can have a negative effect on a vineyard with volatile odours or dust transferring to vineyards and being adsorbed into the waxy cuticle layer on the outside of a developing berry (and potentially being transferred into the wine and resulting in an off flavour or aroma).