

**BEFORE INDEPENDENT HEARING COMMISSIONERS APPOINTED BY THE  
WAIMAKARIRI DISTRICT COUNCIL**

**IN THE MATTER OF**

The Resource Management Act 1991 (**RMA** or  
**the Act**)

**AND**

**IN THE MATTER OF**

Hearing of Submissions and Further  
Submissions on the Proposed Waimakariri  
District Plan (**PWDP** or **the Proposed Plan**)

**AND**

**IN THE MATTER OF**

Hearing of Submissions and Further  
Submissions on Variations 1 and 2 to the  
**Proposed** Waimakariri District Plan

**AND**

**IN THE MATTER OF**

Submissions and Further Submissions on the  
Proposed Waimakariri District Plan by  
**Momentum Land Limited**

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**EVIDENCE OF GEOFFREY CHARLES DUNHAM (SOUTH BLOCK)  
ON BEHALF OF MOMENTUM LAND LIMITED REGARDING STREAM 12  
REZONING OF LAND**

DATED: 5 March 2024

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Presented for filing by:  
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## INTRODUCTION

- 1 My name is Geoffrey Charles Dunham.
- 2 I am a self-employed Registered (NZIPIM) Farm Management Consultant primarily working in Canterbury but with client base between Central Otago and Nelson, and including Central Plateau, with specialisation in pastoral and arable land use systems and development.
- 3 I hold the qualifications of Bachelor Agricultural Science, Lincoln University
- 4 I work with farmers, local and central government organisations, and industry interest groups.
- 5 I specialise in advising in farm and agribusiness management with particular expertise in grazing and stock management systems, arable farming, irrigation & farm development, financial management, and supervise and contract-manage development projects.
- 6 I am familiar and experienced with all the farming practises, soils, and climate of the Kaiapoi and Rangiora area in general including the site in question.
- 7 I have worked for MAF Advisory Services Division based in Nelson and North Canterbury prior to forming my own consultancy practice, Dunham Consulting Ltd, in 2002
- 8 I regularly research and undertake feasibility and financial viability analysis for potential farming options. This has included land development strategy options for unimproved and irrigated land and intensification of land use through conversion to more intensive land use policies. This work has been over a full range of land types and farming systems.
- 9 I have acted as an expert witness in relation to various issues including land use planning, land development disputes, farm machinery development disputes and animal welfare prosecutions.
- 10 My evidence that considers the suitability of the property located at 177 Ferry Road, Kaiapoi for farming purposes.
- 11 My qualifications as an expert are set out above. The matters addressed in my evidence are within my area of expertise, however where I make statements on issues that are not in my area of expertise, I will state whose evidence I

have relied upon. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

### **SCOPE OF EVIDENCE**

- 12 In my evidence I address the following issues:
- (a) The land use capability of the site
  - (b) The range of pastoral, arable and horticultural options that could be physically operated on a long-term basis on the site.
  - (c) Consideration of the climate, soils, and water environments of the site
  - (d) The type and extent of support industries and resources, contractors, and expertise required for a sustainable and viable farming operation.
  - (e) The infrastructure on the site or required on site to support a viable farming business.
  - (f) The site's neighbouring land uses and its potential to impact on viable land use activities on the site.
  - (g) The economic viability of operating a business or use of the South Block compatible with the site's rural zoning under Operative Plan and rural lifestyle zoning under the Proposed District Plan.

### **SUMMARY OF EVIDENCE**

- 13 The hearings panel have requested that each statement of evidence contains a brief summary of evidence.

### **CONTEXT**

- 14 My evidence assesses land located at 310 Beach Road, Kaiapoi (**site or South Block**).
- 15 The site is legally described as LOT 2 DP 83191
- 16 The site contains 6.044700 Ha as a square block of land with a long history of agricultural use as part of a larger farming block of land, including two houses on the southern border, two small sheds, and stock yards.

- 17 The South Block is zoned Rural in the Waimakariri District Council Operative District Plan and zoned Rural Lifestyle under the Proposed District Plan, for both rural use and rural lifestyle use.
- 18 I am familiar with the South Block and visited the site on 2<sup>nd</sup> December 2022.
- 19 I have earlier prepared a comprehensive report that considers the suitability of the above property for farming purposes within each Waimakariri District Council zone entitled "South Block Farming Assessment dated 2 February 2023" (**South Block Report**). My report is attached at **Appendix 1**.
- 20 The discussion that follows is informed by the South Block Report and provides a summary of the key findings contained within that document.

#### **PHYSICAL SITE ATTRIBUTES, AND LOCATION**

- 21 The site is flat at a low elevation above sea level, the same as neighbouring land to the east, resulting in insufficient fall between the site and available storm water drains to provide sufficient year-round drainage of surplus surface water.
- 22 Access to the site by the land user and support activities such as agricultural contractors is through busy key arterial urban streets and either past or near a school and day-care centre. The only access onto site from the road is past a neighbouring day care centre access road and parking area.
- 23 The proximity of neighbouring residential subdivisions, and access via urban roads, make byproducts of agricultural activities – noise, mud on roads, dust, chemical spray, and fertiliser drift - a high potential source of conflict with the community even assuming operating at best practice and by approved registered operators.
- 24 Close proximity to urban housing places livestock, particularly sheep, at elevated risk from dog attack and the farming infrastructure at risk from vandalism and theft.
- 25 The location of the site for agricultural services support and access onto the site is a major disincentive that will restrict the quality and timing of work undertaken and potential productivity levels of physically viable farm policies.

## SOILS AND AVAILABLE LAND MANAGEMENT ACTIVITIES

- 26 Eighty-three percent of the site has deep heavy clay gley soils which are strongly affected by being waterlogged for prolonged periods of time, typically remaining saturated from early winter until late spring/early summer, or occasionally into late summer/early autumn. These are highly structurally vulnerable soils, very easily damaged by pugging or ill-timed vehicle or machinery activities.
- 27 The Land Use Capability of the site is **2w**, defined *as land with slight limitations for arable use and suitable for cultivated crops, pasture, or forestry but where soil wetness resulting from poor drainage or a high-water table, or from frequent overflow from streams or coastal waters first limits production.*
- 28 The key point here is that the wetness limitations override the broad versatility that the Land Class 2 designation implies.
- 29 The soils on the site are predominantly unusable for 5-6 months of the year and up to 7-8 months in some years, being either waterlogged or at excessive moisture content that prevent grazing and or land management activities without soil or pasture damage. The site elevation in relation to neighbouring land means that the high-water tables are always going to be the predominant state.
- 30 Water-logged soils or even the high chance of becoming waterlogged means that any perennial horticultural crops or root vegetable crop are not a viable proposition, but sheep grazing, and young light cattle could be considered.
- 31 The combination of difficult to manage soil types, and low-lying flat topography of the site and surrounding land resulting in ineffective drainage means that arable cropping, dairy farming, growing of winter green feed crops (dairy support or beef), horse agistment, and perennial horticulture crops are not feasible.
- 32 Of all the possible farming enterprises, the most likely is light weight livestock; all the others are precluded because of the wet soils.

## EXISTING INFRASTRUCTURE, PASTURE COVER AND STOCKING RATES

- 33 Fencing on site is rundown and not currently stock proof; stock water troughs are old or missing and not functioning, cattle yards are adequate for small numbers of stock but trucking load out ramp is onto a house parking area

preventing conventional stock truck access, shelter trees are scattered, one shed serving as a makeshift wool handling area, other sheds old and of no value to any viable farming activities, and pasture cover is predominantly runout in favour of poor productivity and quality species.

#### **SITE DEVELOPMENT REQUIRED TO SUPPORT ANIMAL GRAZING ENTERPRISE**

- 34 Any financially viable animal grazing enterprise would require better pastures and a regular pasture renewal programme.
- 35 Upgrading infrastructure for livestock farming is estimated to cost \$20,000 - \$25,000, and pasture renewal is estimated at minimum of \$3,000, and to be repeated every 2-3, supported by estimated \$800/year of annual maintenance fertiliser, not including any nitrogenous fertilisers.
- 36 The effective farming area is 5.2 hectares currently carrying an estimated 11.6 stock units per hectare, which is the same as wider district average stocking rates.

#### **FINANCIAL VIABILITY OF ANIMAL GRAZING ENTERPRISE**

- 37 Even assuming that a potential land user could operate a stocking rate 25% higher than the district average and using available productivity and economic benchmarks [Beef & Lamb NZ; Economic Service] the gross income is calculated at \$15,000 per annum, farm operating expenses \$9,700, livestock loan costs \$500, and interest and principle costs of development of \$6,300 for a net annual return of -\$5,800. There is no return of labour, and assumes the land is owned debt free.
- 38 There is no operational scale or enough land-class diversity on the site with which to manage and mitigate farming risk.

#### **MATTERS RAISED BY SUBMITTERS**

- 39 There are no matters raised by submitters that are relevant to my statement of evidence.

#### **CONCLUSION**

- 40 The soils on the site are predominantly unusable for 5-6 months of the year and up to 7-8 months in some years, being either waterlogged or at excessive moisture content that prevent grazing and or land management activities without soil or pasture damage. The site elevation in relation to neighbouring

land means that the high-water tables are always going to be the predominant situation.

- 41 The infrastructure is poor and requires significant upgrade to allow better management practise to be used and increase productivity.
- 42 The location of the site for agricultural services support and access onto the site are a major disincentive that will restrict the quality and timing of work undertaken. Further the current land use of neighbouring properties (residential housing, day-care centre, school) places the operator under high potential business risk from the very start, no matter how well the farm is run.
- 43 Of all the possible farming enterprises, the most likely is light weight livestock; all the others are precluded because of the wet soils.
- 44 There is no scale or enough land class diversity on the site with which to manage and mitigate farming risk.
- 45 Even at high stocking rates the financial returns are likely to be little better than breakeven, and with little chance of recouping any capital invested into land improvement. There is no return for labour included, and my calculations assume the land is owned debt free.
- 46 It is difficult to see any prudent land user placing themselves under these kinds of risks to farm the land on this site.
- 47 While a Rural Lifestyle use a lower financial imperative, the land use is still restricted to livestock including horses, with plants or orchard or gardening having the same obstacles of waterlogged soils.
- 48 Thank you for the opportunity to present my evidence.

Geoffrey Charles Dunham

Date: 5 March 2024