

BEFORE THE SELWYN DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Plan Change 71 to the Operative District Plan - Four Stars Development Limited and Gould Developments Limited

**STATEMENT OF EVIDENCE OF VICTOR MKURUTSI MTHAMO ON BEHALF OF
FOUR STARS DEVELOPMENT LIMITED AND GOULD DEVELOPMENTS LIMITED**

VERSATILE SOILS, WATER SUPPLY & FLOODING

Dated: 24 January 2022

INTRODUCTION:

- 1 My full name is Victor Mkurutsi Mthamo.

SCOPE OF EVIDENCE

- 2 My evidence is presented on behalf of the Applicant in these proceedings.
- 3 My evidence addresses the following:
 - 3.1 Versatile soils
 - 3.2 Water supply
 - 3.3 Flooding

Versatile Soils

- 4 The proposed plan change will be in an area that has 51.85 ha of LUC Class 2 soils and 2.04 ha of LUC Class 3 soils.
- 5 The predominant soil are the Templeton silty loams. These are over 85.7% of the PC71 area. The remaining 14.3% of the PC71 area is over Eyre silt loams.
- 6 In general, the soils do not appear to have any issues that could hinder plant growth and hence productivity.
- 7 It is my opinion that use of LUC Class in defining soil versatility is only a first step and where site specific information is available this should be taken into account. This is also confirmed by the proposed National Policy Statement on Highly Productive Land (NPS-HPL) which considers the use of LUC classes as only a starting point pending the availability of site specific information when councils get to it.
- 8 On consideration of site specific factors, it is my opinion that the effect of the proposed Plan Change on the district and regional agricultural productivity potential is insignificant because:
 - 8.1 Soil moisture data shows the area is susceptible to soil moisture deficit. Without water for irrigation the land cannot achieve its full production potential.
 - 8.2 The land is currently used for pasture production and is not intensely farmed. Under the Canterbury Land and Water Regional Plan and the provisions in the Selwyn Te Waihora Sub-regional plan, intensive farming may not be possible due to restrictions on nutrient losses.
 - 8.3 Assuming there were no other constraints (e.g. water availability), advances in technology and farming techniques over the years have been such that the removal of 53.89 ha is unlikely to result in any significant loss in production as this can be made up for elsewhere in the district and even on soils of lower LUC classes.
 - 8.4 The developable area in the context of the total LUC 1 and LUC 2 soils in the district and the regional is very small (0.0064% and 0.038% respectively).

- 8.5 Furthermore, 17 ha of the 51.85 ha has been designated as a FDA which means 31.85 ha of LUC Class 2 soils would be the total new area which would be potentially lost due to the proposed Plan Change. The developable area in the district and on a regional basis becomes 0.042% and 0.025%.
- 8.6 The site is already bound by existing subdivisions and lifestyle blocks. There are potential reverse sensitivity issues associated with intensifying agricultural production in such an area and I have discussed these in detail in Paragraphs **Error! Reference source not found.-Error! Reference source not found..**
- 9 For completeness I assessed the total LUC1-LUC3 soil class losses within the Selwyn District. I searched through the Selwyn District Council and Canterbury Regional Council websites for land use consents that would also result in potential losses in versatile soils between January 2018 and 10 November 2020 (the PC71 lodgement date).
- 9.1 I have listed the relevant ones in Table 1 of **Attachment 1**.
- 9.2 In summary:
- (a) The cumulative potential loss in productive soils since January 2018 (PC49) up to November 2020 when PC71 was lodged is 0.53%. This is summarised Table 2 of **Attachment 1**.
- (b) The reduction in LUC1-3 soils in the region resulting from the Selwyn District LUC1-3 changes is 0.089% (Table 3 of **Attachment 1**).
- 10 It is, therefore, my conclusion that any concerns regarding cumulative effects would be overstated.

Water Supply

- 11 A third of the PC71 area is part of the Rolleston Structure Plan (RSP) and Future Development Area (FDA) in the Regional Policy Statement and the potable water requirements associated with this area is included in the Selwyn District Plan's planning.
- 12 I estimate the potable water requirements for the other two-thirds of the PC71 area as:
- 12.1 96,360 m³/year.
- 12.2 45 L/s instantaneous flow.
- 13 Firefighting requirements can be met from the potable supply allocation.
- 14 There are options available or highly likely to be available to meet the demand for the PC71 area including the provision of a new community water supply take on the land and/or by purchasing and transferring consents from other sites.
- 15 New takes for community water supplies are a restricted discretionary activity under Rule 5.115 of the Canterbury Land and Water Regional Plan (CLWRP).
- 16 With respect to the transfer option:

- 16.1 SDC is happy with a consent transfer as a solution for meeting the water demands for the PC71 area.
- 16.2 The CLWRP has rules which enable consents to be transferred from site to site. Therefore, there is no statutory reason the proposed solution cannot be implemented.
- 17 Currently SDC has a total consented volume for the Rolleston scheme of 7,183,440 m³/year. Over the last three years the average annual use has been 3,300,000 m³/year. The difference between the consented volume and the demand is 3.88 Mm³/year, which is a significant existing surplus.
- 18 While SDC prefers the Applicant to provide either: (i) consents and the new community supply; or (ii) a purchase and transfer and establish the water supplies outright, there is a possibility that the surplus capacity of 3.88 Mm³/year can be used to meet the 96,360 m³/year required for the two-thirds of the PC71 area outside the FDA. This arrangement will require the "Applicant" to fund the future replacement of this water when it is required.
- 19 I recommend further future discussions with the Council on the two options relating to the timing of the water supply to the development.
- 20 Overall, it is my view that the balance of the PC71 outside of the FDA can be provided with a potable water supply at the time of development.
- 21 In her Section 42A report, Ms. White recommends a rule that will restrict subdivision until a water supply is provided. Given my opinion that potable water can be provided to the PC71 area, I do not see the need for the proposed rule. The applicant should just be able to demonstrate at the subdivision stage that each stage submitted for subdivision consent can be supplied with potable water to meet the requirements.
- 22 **Flooding Assessment**
- 22.1 My assessment shows there are no areas of high flood hazard within the site boundary which would be inappropriate for development.
- 22.2 The statutory requirements relating to flood hazards in the proposed District Plan and the Canterbury Regional Policy Statement will be achieved.

Victor Mthamo

9 February 2022

ATTACHMENT 1 – QUANTIFICATION OF CHANGES IN VERSATILE SOILS IN SELWYN DISTRICT

Table 1 – LUC Classes 1-3 Soils “Lost”

Plan Change	LUC 1	LUC 2	LUC 3	Total	Comments
PC49	2.3	5.8		8.1	
PC50					Fonterra Darfield - no new loss of land
PC54			31.3	31.3	
PC59			19.5	19.5	Total PC59 area = 31.4 ha but 11.9 ha developed prior to 2018.
PC60			17.9	17.9	
PC61			30.76	30.76	Industrial
PC62		42.9	17.1	60	
PC63			60.6	60.6	
PC64	0	0	0	0	All in LUC Class 4
PC66		27.28		27.28	Commercial
PC67		13.7	19.7	33.4	
PC68		36.13	7.57	43.7	23.8 ha in LUC4. No LUC1
PC69	33.8	111.1	45.3	190.2	
PC70	0	0	0	0	All in LUC Class 4
PC71		51.85	2.04	53.89	
Roydon Quarry		99.7	68.2	167.9	Fulton Hogan. 2.9 ha is in LUC4
Total	36.1	388.46	319.97	744.53	

Notes

There are no details on PC51-53, PC55-58 and PC65

Table 2 – Changes in Versatile Soils in Selwyn Since 2018-PC71

LUC Class	Area	PC49-71	Net HPL after PCs	%age HPL Losses
LUC Class 1	6,522	36.10	6,485.9	0.554%
LUC Class 2	46,111	388.46	45,722.5	0.842%
LUC Class 3	87,927	319.97	87,607.0	0.364%
Total	140,560	744.53	139,815.5	0.530%

Table 3 – Regional Changes in Versatile Soils Due to LUC1-3 Changes in Selwyn Since 2018-PC71

LUC Class	Area	PC49-71	Net HPL after PCs	%age HPL Losses
LUC Class 1	23,200	36.10	23,163.9	0.156%
LUC Class 2	270,500	388.46	270,111.5	0.144%
LUC Class 3	543,000	319.97	542,680.0	0.059%
Total	836,700	744.53	835,955.5	0.089%