

## Notice of Submission on an Application for Resource Consents RC225687 & RC225736

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Resource Management Act 1991 – Form 13

Send or deliver you application to: Selwyn District Council, PO Box 90, Rolleston 7643

For enquiries phone: (03) 347-2868

For enquiries email: [planninginfo@selwyn.govt.nz](mailto:planninginfo@selwyn.govt.nz)

### SUBMITTER DETAILS

**Submitter Name:** MC & BH Bell Family Trust

**Submitter Address:** 483 Volckman Road

**City/Town:** Leeston

**Postcode:** 7683

**Contact Name:** c/- Jane West

**Contact Organisation:** JWest Limited

**Contact Address:** 50 Selwyn Lake Road, RD3

**City/Town:** Leeston 7683

**Contact Email:** 

**Contact Phone Number:** 

### TRADE COMPETITION DECLARATION

The submitter could not gain an advantage in trade competition through this submission.

### APPLICATION DETAILS

**Application reference number:** RC225687 & RC225736

**Name of applicant:** Selwyn District Council (SDC)

**Application site address:** Leeston

**Description of proposed activity:** Land use consents to facilitate construction of the Leeston Stormwater Flood Bypass scheme:

- Land use consent for works associated with the establishment, operation and maintenance of the scheme

- Land use consent to undertake soil disturbance and potential removal under the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESC)

## SUBMISSION DETAILS

We ☒ **Oppose all or part of the application.**

**The specific part of the application that my/our submission relates to are set out below.**

**The reasons for my/our submission are set out below.**

**The decision I/we would like the Council to make is:**

Please refer to the details of the submission set out below.

## SUBMISSION AT THE HEARING

We wish to speak in support of our submission.



If others make a similar submission we will consider presenting a joint case with them at the hearing.

## DETAILS OF THE SUBMISSION

**The specific parts of the application that our submission relates to are:**

The works required to construct the Leeston stormwater flood bypass scheme and the post-construction adverse effects the submitter's property.

**The reasons for our submission are:**

MC & BH Bell Family Trust (the submitter) have several concerns regarding the resource consent application by Selwyn District Council (SDC) for the works related to the construction of the Leeston stormwater flood bypass scheme and the adverse effects that the works will have on their properties in a flood event following construction.

The concerns held by the submitter relates to adverse effects on the following properties:

- 483 Volckman Road, Leeston
- 75 Station Street, Leeston (corner of High Street and Station Street)

Both properties are zoned for future development under the recently released Proposed Selwyn District Plan (PODP). The property at 483 Volckman Road is partially zoned General Industrial (GI) and partially zoned General Rural (GRU), and 75 Station Street is zoned General Residential (GR).

In general terms the submitter supports the efforts of SDC to deal more effectively with stormwater and flooding in and around Leeston. However, the adverse effects from the proposed Leeston stormwater bypass scheme, and the works required to facilitate it, have the potential to cause significant adverse effects on properties owned by the submitter. The submitter also does not believe that the full extent of the adverse effects is known and understood by SDC.

The proposed works and final outcomes from the project results in significant increases in water depth across 483 Volckman Road. But 75 Station Road should also have been notified due to the potential effects on this site. The submitter does not believe it is their responsibility to deal with additional flood waters (and associated time and costs) that will affect the planned future use and development of their land.

The submitter has the following concerns:

1. Lack of consultation on 75 Station Street
2. Lack of accurate flood modelling
3. Adverse effects of flooding
4. Adverse effects of the proposed works

The reasons for the concerns listed are set out below.

## **1.0 Lack of Consultation on 75 Station Street**

- 1.1 The application was limited notified to six parties. This included 483 Volckman Road but did not include 75 Station Street.
- 1.2 The submitter contends that the methodology employed by SDC and their consultant was unsuitable for assessing 75 Station Street, leading to the exclusion of this site from notification. Notably, the site (75 Station Road) experiences flooding in its pre-development scenario, indicating that there would be no alteration in water depth under the SDC methodology when evaluating the post-development scenario.
- 1.3 However, the submitter believes that the flow across 75 Station Street and other sites in the area will have substantially increased and therefore more flow will need to be conveyed through the site. SDC should provide the change of flows and velocity between pre-development and post-development MPD scenario (Leeston Stormwater Bypass and Oakvale subdivision constructed).
- 1.4 The submitter believes that both properties are affected by the proposed works and is concerned that other properties are likely to be potentially affected and should also have been notified.
- 1.5 In this case it is fortunate the submitter has an interest in both properties and the concerns raised in this submission relate to both.

## 2.0 Lack of Accurate Flood Modelling

- 2.1 As above the submitter believes that the methodology chosen by SDC to assess the affected properties is not correct and that flow and velocity should have been considered too.
- 2.2 The submitter also believes that the modelling does not capture the full extent of the flooding. In the application SDC claim to have modelled a 1% AEP, but also state in Appendix 8, Page 7 of the AEE that due to changes in how rainfall is now assessed to include climate change, the chosen rainfall is now believed to be only 1.3% AEP (i.e. 1 in 80 year not 1 in 100 year). This will reduce the flows that have been modelled within the design of the Leeston stormwater bypass and therefore will not show the full extent of the increase in depth on 483 Volckman Road and any increase in flows and velocity over both sites in the true 1% AEP. The submitter believes that SDC should rerun the models using the true 1% AEP including the commonly used RCP 8.5, 2081 to 2100.
- 2.3 SDC requirements are for residential developments to provide flood assessments using a 0.5% AEP event for the assessment of pre and post development flooding. The 1% AEP is local catchment flooding, whereas 0.5% AEP is Selwyn River breakout flow. If SDC require residential sites to incorporate the Selwyn Breakout flow then surely SDC must also model 0.5% AEP for the Leeston Stormwater Bypass to understand the effect of the Bypass on the local residential areas.
- 2.4 The submitter believes that the current SDC modelling should model the 0.5% AEP at the residential areas along the drains for pre-development and post-development MPD scenario (Leeston Stormwater Bypass and Oakvale subdivision constructed). The submitter also believes that the pre- and post-bypass scenario without development should be modelled to account for the interim development period prior to Oakvale subdivision being fully developed. Further, this modelling should check the flow and velocity profile for these scenarios to confirm whether there has been a change in flows in these areas that will affect the stormwater solutions for residential sites in the future.
- 2.5 Since February 2021 the submitter has been working closely with SDC planning and engineering staff on a proposed residential development of 75 Station Street. Discussion has focussed on potential flood risk and substantial time and money has been spent on updated and refined flood modelling for the site and surrounding area of Leeston.
- 2.6 The flood modelling developed for 75 Station Street is a more refined version of the current modelling relied upon within the Leeston bypass applications and could be used to provide the baseline scenario Leeston pre-development and pre-bypass compared with a scenario pre-development but post-bypass, that takes account of the impact of the Leeston bypass. The submitter believes that SDC should also model post-bypass plus post-development of Oakvale subdivision, to show the full extent of the MPD scenario on downstream residential properties.
- 2.7 The submitter is concerned that the Leeston bypass application has not provided these refined modelling scenarios. The submitter is willing to share their flood modelling with SDC to help facilitate this and collaborate with SDC on flood modelling and works that will not result in adverse effects on their properties.
- 2.8 Please find appended to this submission several photos taken during July 2022 and July 2023 to demonstrate the flooding that occurs in the vicinity. The submitter is concerned that although 2022 was a wet July, these water levels were experienced after only 34.5 ml of rainfall, which demonstrates the potential of choking the existing drains where the

diversion culverts cross High Street / Volckman Road. This creates a bottleneck of flows exiting the Leeston township. If this was a 1 in 5-year event it is important to note there was only approximately 20% freeboard capacity remaining in the culvert before flooding of High Street and south.

### 3.0 Adverse Effects of Flooding

- 3.1 As discussed above the submitter does not believe that the full effect of flooding is understood for the residential site at 75 Station Road. The area in question shows no difference in flood depth or flood extent between the pre-Leeston Stormwater Bypass and post-Leeston Stormwater Bypass. The submitter believes that velocity and flow across the sites should have been considered as is normal practice when considering flood hazards. These velocity/flow comparisons should be for pre-development pre-Leeston Stormwater Bypass scenario and a pre-development post-Leeston Bypass scenario and a post-development (Oakvale Subdivision) post-Leeston Bypass scenario to see the full change in flows across the works that are proposed within the township of Leeston.
- 3.2 The SDC application asserts that at 483 Volckman Road, while the depth of flooding increases, the overall extent decreases, yet fails to provide a rationale for this. The submitter would like an explanation and asks that SDC model the full current 1 in 100 year event to confirm the flood depth and extent in a true 1 in 100 year event. The submitter also believes that SDC should prove the depth/extent difference for the 1 in 200 year event that all development is required to model and to show the differences if any in the velocity/flow profile across the site.
- 3.3 From the submitter's model the flow through the site in the post-bypass scenario is now 18m<sup>3</sup>/s, which could be described as a 18m wide by 1m deep corridor of flow that needs to be conveyed across the site. This has the potential to create significant adverse effects over and above those described in the application. The adverse effects of this increase need to be properly assessed to ensure that future residential, rural and/or industrial uses of the sites is not affected, and that the submitter does not suffer increased costs of cleanup and insurance, or unreasonable limitations on the future use of the site.

### 4.0 Adverse Effects of the Proposed Works

- 4.1 Global stormwater discharge application CRC186175 lodged June 2018, is still on hold.
- 4.2 The submitters note that the following ECan resource consents are issued:

Issued in 2007:

CRC071838.2 To discharge contaminants into surface water (terminated 22 Jan 2014)

CRC071839 To divert a watercourse, being the flood overflow channel of Leeston Creek as part of a proposed residential subdivision comprising of approximately 330 lots on land which has been rezoned Living 2 and Living LXA under the Selwyn District Plan

CRC071840 To undertake works in a watercourse to establish the overflow for the flood overflow channel in Leeston Creek as part of a proposed residential subdivision comprising of approximately 330 lots on land which has been rezoned Living 2 and Living LXA under the Selwyn District Plan

CRC072300 To excavate soil from over a confined aquifer for the creation of a new channel and wetland at or about map reference

Issued in 2023:

CRC212191 To excavate land and remove vegetation

CRC212192 To install and remove structures and to disturb the bed

CRC212193 To dam and take surface water

CRC212194 To discharge surface water and sediments to surface water

- 4.3 These resource consents are focused on the works associated with the Manse Road, Pound Road and Leeston Dunsandel Road area for the bypass itself (the Leeston North Stormwater Management Plan that was proposed as part of subdivision in that area, now known as Oakvale).
- 4.4 Those resource consents issued in 2007 under the then Transitional Regional Plan and Proposed Natural Resources Regional Plan do not reflect updated flood modelling techniques, nor do they assess the works now proposed at the Volckman Road end of Leeston or the adverse effects of those works on the submitters' properties at the Volckman Road end of Leeston.
- 4.5 The resource consents issued in 2023, although issued under the current regional planning provisions, still maintain the use of the 1.3% AEP event used on previous stages of development of the Leeston bypass, not the true 1% AEP including the commonly used RCP 8.5, 2081 to 2100. As discussed above, the applicant has not used the more refined level of flood modelling recently required by SDC and now available through SDC engagement with the submitter on development of 75 Station Street.
- 4.6 The submitter is also concerned around potential effects of the installation of berms, potential need for the removal of shelterbelts on the property at 483 Volckman Road, and any impact this might have on the future use of the site under its GRUZ and GIZ zoning.

**We wish the consent authority to make the following decision (please give reasons, including the general nature of any conditions sought):**

In the first instance require specific details to be provided on the questions and concerns raised above. The submitter is willing to work with SDC to ensure that works are undertaken in a way that benefits all parties.

- 1) Rerun either the SDC model or utilise an updated version of the submitter's model to reflect the full Leeston stormwater bypass works with a true 1% AEP rainfall event.
- 2) Confirm the difference within 75 Station Street of the velocity/flow between the pre-development scenario and post-bypass but pre-Oakvale development, then -post-bypass plus post-development.
- 3) Confirm the depth, extent, velocity, flow differences for 483 Volckman Road for the above scenarios for the true 1% AEP.

- 4) Confirm the difference in velocity/flow for the 0.5% AEP in the residential and industrial zoned areas at 75 Station Street and 483 Volckman Road.
- 5) SDC to compensate and aid the submitter to resolve any issues caused by the Leeston stormwater bypass to improve the bypass works and any other works to aid the township of Leeston.

Place the application on hold until such time as adequate flood modelling has been undertaken and proven that the adverse effects on the submitter's properties will be avoided or effectively mitigated.

That robust and enforceable conditions are applied to the resource consent to ensure that the activity operates in accordance with the requirements of the flood modelling and that adverse effects on the submitter's properties will be avoided or mitigated.

## SIGNATURE

*(Of submitter(s) or person authorised to sign on behalf of submitter(s))*



Signature:.....

Date: 1 March 2024

Signature:.....

Date:.....

Note: A signature is not required if you make your submission by electronic means.



## PHOTOS

The following photos were taken on 30 July 2022 after 34.5 ml of rain.









The following photos were taken on 23 July 2023 after 61.5 ml of rain.









