17 June 2019

Environment Canterbury
Regional Council
Kaunihera Taiao ki Waitaha

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Jacobs New Zealand Ltd
Attn To: Ian Wiseman
PO Box 1147
Christchurch 8140

Dear Ian,

Request for Further Information

Response required by: 8 July 2019
Record Number/s: CRC186171
Applicant Name: Selwyn District Council
Activity Description: to discharge stormwater to surface water and onto or into land

Overview

As you are aware, Meg Buddle has been processing your consent application. So we can progress your application, we are asking for some further information under Section 92 of the Resource Management Act 1991 (RMA).

Options available to you are detailed below under **Response options**. Please complete one of these options by 8 July 2019. We need this information so we can understand any potential effects from your application. Without this further information, your application may have to be notified or declined.

Notification means that potentially affected parties and/or the general public are given the opportunity to raise their concerns or support for your proposal. Notification does not guarantee your application will be granted – there is the possibility it could be declined. For more information about notification, please go to https://ecan.govt.nz/do-it-online/resource-consents/notifications-and-submissions/.

Information requested

Meg Buddle has identified the following information which we need to understand your proposal fully.

A. Extra site inclusions from 2025

Since the proposal is now to include and manage the discharges from all sites within the respective Stormwater Management Areas, from January 2025, could you provide some background information on the extra sites ('high-risk sites') which are now going to be included in the consent come 2025, including:

1. Estimates of the number of high-risk sites which are currently discharging into the Selwyn District Council Network;
2. Estimates of the number of high-risk sites which currently discharge directly to surface water; and
3. Estimates of the number of high-risk sites which currently discharge directly onto or into land.

B. Hazards assessment

The stormwater network includes areas that have not yet had building, development or other impermeable hardstanding occur, meaning there is potential for increases to impermeable areas and therefore greater stormwater volumes. The application assessment suggests that the effects would be negligible, however, this is not quantified.

1. Please confirm that, for all the stormwater management areas with a greenfield component, those greenfield areas are not expected to be developed to introduce more impermeable area; and
2. If the relevant greenfield areas will experience future development, please provide justification as to how the effects of an increase in impermeable area would be negligible over the duration of the consent.

Mention is made of flooding within the *'surface water objectives'* and *'stormwater service targets'* of the stormwater management plans. Flooding is not included in the 'issues' sections, and no further details on flooding management are provided.

3. Please provide details on how flooding will be managed and incorporated into the stormwater management plans. Alternatively, you may wish to justify why flooding is not considered within the *'issues'* section of the stormwater management plans, and why details of flooding management are not necessary.

It is noted that many of the towns (*Springston, Leeston, Arthurs Pass, Doyleston, Glentunnel, and Lake Coleridge*) are currently only designed for a 2-year storm event, significantly below current engineering design standards. In other cases (*Dunsandel, Springfield, and Whitecliffs*) the design standard of the stormwater system is not identified.

4. Please identify the design standard of all stormwater systems;
5. There is no discussion within the stormwater management plans on improving the capacity of the existing stormwater network. Please discuss why improving the existing stormwater system is not included within the stormwater management plan, especially considering it is significantly below existing stormwater design standards.
6. Please discuss any initiatives that may be included in the stormwater management plans for the townships that are aimed at managing flooding from existing sites.

C. Surface Water & Ecology

1. Dunsandel, Glentunnel and Springston

The information and assessment of effects provided for the townships of Dunsandel, Glentunnel and Springston need to be provided to for our expert to determine whether the stormwater discharges cause, or will cause, any effects on the receiving environment.

a. Dunsandel

We require additional information to support your conclusion that the receiving waterbody, the unnamed tributary of the Irwell River (the 'Brookside Drain'), is normally dry outside of rain events. Could you:

i. Visit, and take a geo-tagged photo in dry weather conditions to show that the stream is dry. This should occur outside of the summer months.

b. Glentunnel

We require additional information to support your conclusion that the receiving waterbody, the Selwyn River, is not, or will not be, significantly affected by total suspended solids (TSS) present in stormwater discharges. Could you:

i. Measure the TSS concentrations in discharges to the waterbody during the next storm event, and estimate or measure the discharge rates during the time of sampling.

c. Springston

We require additional information to support your conclusion that the receiving water bodies, the Days Road Drain and the two tributaries of the Leeston Road Drain, are normally dry outside of rain events. Could you please:

i. Visit, and take a geo-tagged photo in dry weather conditions to show that the water bodies are dry. This should occur outside of the summer months.

2. Doyleston and Leeston

The information and assessment of effects provided for the townships of Doyleston and Leeston contain some inaccuracies and is insufficient for our expert to determine whether the stormwater discharges cause, or will cause, any effects on the receiving environment.

a. Doyleston

In our opinion, the limited water quality data presented in your application is not sufficiently robust to support the conclusion that the discharge of stormwater is not having, or will not have, an impact on the receiving surface water bodies of Boggy Creek and the Doyleston Drain ('Drain Road Drain'), as:

i. You have not provided any dry-weather water quality, sediment concentration or ecological sampling;

ii. There is insufficient wet-weather sampling data to be able to make categorical conclusions regarding the effects of stormwater discharges on the ecology of receiving water bodies;

iii. You have not presented sufficient evidence to support your view that the receiving waterbodies have no flow during dry weather and, as a result, there is limited potential for effects to arise from the discharge of stormwater to these streams;

iv. You have incorrectly applied the wrong Schedule 5 water quality standards in your assessment (used the 99% species protection threshold instead of the correct 95%). The discharges, when assessed using the correct threshold, in fact, did cause the Schedule 5 standards for zinc to be exceeded in Doyleston Drain on the day that sampling was conducted; and

v. Your assessment of the effects the stormwater discharges are having or will have, on water quality and ecology in Boggy Creek is not sufficient.

Please provide an assessment of the effects of the discharges from the Doyleston Township taking the above points into account.

Please also provide:

vi. An explanation of why water quality and ecology in Boggy Creek itself were not assessed as part of the AEE (if no reasonable explanation can be given, a proper assessment of water quality will be required);

vii. Any additional information to support your assumption that Doyleston Drain and Boggy Creek only flow during wet-weather (if such evidence exists, the recommended dry weather and ecological monitoring should not be required).

b. <u>Leeston</u>

In our opinion the limited water quality data presented in your application is not sufficiently robust to support the conclusion that the discharge of stormwater is not having, or will not have, an impact on the receiving surface water bodies of Leeston Lake Road, Chapman or Beetham drains, as:

i. You have not provided any dry-weather water quality, sediment concentration or ecological sampling;

ii. There is insufficient wet-weather sampling data to be able to make categorical conclusions regarding the effects of stormwater discharges on the ecology of receiving water bodies;

iii. You have not presented sufficient evidence to support your view that the receiving waterbodies have no flow during dry weather and, as a result, there is limited potential for effects to arise from the discharge of stormwater to these streams; and

iv. You have incorrectly applied the wrong Schedule 5 water quality standards in your assessment (used the 99% species protection threshold instead of the correct 95%). The discharges, when assessed using the correct threshold, in fact, did cause the Schedule 5 standards for copper and zinc to be exceeded in the waterbodies on the day that sampling was conducted.

Could you revisit your assessment of the effects of the discharges from the Leeston Township taking the above points into account.

Please also provide:

v. End-of-pipe ammonia, phosphorus and *E. coli* concentrations;

vi. An explanation as to why water quality and ecology in Leeston Lake Road, Chapman and Beetham drains were not assessed as part of the AEE;

vii. Confirmation of the location of receiving environment monitoring sites for Leeston Lake Road, Chapman and Beetham drains; and

viii. Any additional information you may have to support your assumption that Leeston Creek and Birdlings Brook only flow during wet-weather.

D. Groundwater

Your groundwater assessment has been examined by one of our groundwater scientists. As a result of his advice, our main concerns are around groundwater mounding and potential effects on groundwater quality in private wells that supply drinking water.

Could you please provide further information around:

a. How you plan to mitigate the effects of stormwater discharges on groundwater quality in private wells that are used for drinking water within the discharge areas

b. Any past observations groundwater mounding at/ or near the discharge points. How do you plan to manage/ mitigate effects on groundwater quality at the discharge sites with a high groundwater table.

c. Any measurements you may have for the depth to groundwater at the soak hole sites in the township of Dunsandel.

E. Monitoring Programmes

1. Groundwater

Please provide an updated monitoring programme for each township which, as appropriate, includes sufficient baseline and ongoing monitoring to detect:

a. If or when groundwater contaminant concentrations, in the vicinity of the existing or future discharges of stormwater to land, exceed the Canterbury Land and Water Regional Plan (LWRP) Schedule 8 water quality standards; and

b. If the existing or future discharges of stormwater to land are causing the exceedance.

2. Surface water quality and ecology

a. Dunsandel and Springston

If the receiving water bodies are found to be ephemeral through the investigations required above, then dry-weather water quality, sediment quality and ecological monitoring should not be required. However, if the receiving water bodies are found to have a baseflow outside of rain events, dry-weather water quality, sediment quality and ecological monitoring should be required so that any changes resulting from a shift in land-use, climate, or traffic volume can be detected and managed. Monitoring should include:

i. Quarterly dry-weather water quality monitoring for five years if wet-weather sampling reveals increasing trends in contaminant concentrations or exceedances of the LWRP Schedule 5 water quality standards;

ii. Three-yearly sediment quality monitoring, beginning the first year of the consent; and
iii. Invertebrate sampling two times in every five-year period beginning the first year of the consent, with samples being taken on non-consecutive years.

b. Glentunnel and Whitecliffs

The monitoring plan should be amended to include, for the respective discharge points to the Selwyn River:

i. Quarterly dry-weather water quality monitoring for five years if wet-weather sampling reveals increasing trends in contaminant concentrations or exceedances of the LWRP Schedule 5 water quality standards; and
ii. Three-yearly (instead of five yearly) sediment quality monitoring, beginning the first year of the consent.

c. Doyleston and Leeston

The draft monitoring programme is not robust enough to establish a baseline or detect trends in water quality, sediment quality or ecology. We recommend that:

i. Two rounds of wet-weather water sampling every third year beginning the first year of the consent;
ii. Quarterly in-stream water sampling be conducted (for Doyleston in Doyleston Drain and Boggy Creek (not it's tributary); and for Leeston in Leeston Creek and Birdlings Brook) for the first five years of the consent (or monthly sampling for two years);
iii. Annual ecological monitoring be conducted (for Doyleston in Doyleston Drain and Boggy Creek (not it's tributary); and for Leeston in Leeston Creek and Birdlings Brook) for at least the first five years of the consent;
iv. Sediment quality be monitored every three years; and
v. Dissolved organic carbon and hardness be measured in all water samples.

d. Arthur's Pass and Lake Coleridge

Water quality, sediment quality and ecological monitoring is required in the unnamed creek so that any changes resulting from a shift in land-use, climate, or traffic volume can be detected and managed.
Monitoring (for Arthur's Pass in the Bealey River, and for Lake Coleridge in the unnamed creek only) should include:

i. Two rounds of wet-weather water sampling every third year beginning the first year of the consent;
ii. Quarterly dry-weather water quality monitoring for five years if wet-weather sampling reveals increasing trends in contaminant concentrations or exceedances of the LWRP Schedule 5 water quality standards;
iii. Three-yearly sediment quality monitoring, beginning the first year of the consent; and
iv. Invertebrate sampling two times in every five-year period beginning the first year of the consent, with samples being taken on non-consecutive years.

3. <u>Tangata Whenua Values</u>

Where appropriate, could you update your proposed monitoring programme for each township to show the details of your ongoing monitoring regarding the effects of the existing and future discharges of stormwater on Tangata Whenua values.

Response options

The options available to you are set in Section 92A(1) of the RMA. You must choose one of the following options.

A. **Supply the requested information** by 8 July 2019.

   If the information can be easily collated and supplied by this date, please provide it in writing (via email is fine) to Meg Buddle.

B. **Agree in a written notice** by 8 July 2019 to supply the information requested.

   Sometimes technical information will take some time to collate or key contacts may not be immediately available. If you need a longer period of time to supply the information requested, please contact Meg Buddle to advise when you can provide the information. You can do this via email or letter.

C. **Refuse in a written notice** by 8 July 2019 to supply the requested information.

   If you chose Option C, section 95C of the RMA requires us to publicly notify your application. If you receive submissions on your application, then you can expect to go through a resource consent hearing process. The charges fact sheet at this link indicates likely costs for a resource consent hearing: https://ecan.govt.nz/do-it-online/resource-consents/first-steps-and-costs/. You should be aware that your application could be declined through this process.

If you chose not to respond to this letter, then the process for Option C. applies.

If you would like to discuss this request in more detail, please don't hesitate to contact Meg Buddle at meg.buddle@ecan.govt.nz or 03 367 7408.

Yours sincerely,

Catherine deGraaff
Team Leader Consents Planning

cc:
Selwyn District Council
Attn To: Murray England
PO Box 90
Rolleston 7643