Isherwood Consultants

35 Panorama Drive Nelson, 7011

021 0663356 csisherwood@hotmail.com



1 November 2019

Ms Susi B Solly Nelson City Council 110 Trafalgar Street Nelson

Dear Ms Solly,

RE: S92 RFI Response RM 195191 & 195192

Subdivision

1.Please provide an amended assessment of environmental effects to address any matters that may arise out of the preparation of the further information you provide to the Council.

Amendments have been made to the proposed location of the wastewater disposal field, the new location has been reviewed and approved by suitably qualified wastewater and geotechnical engineering experts (see attached RFI responses from Flow Environments and Cameron Gibson and Wells Limited). Exact system details such as system type and dripline layout will not be specified until detailed design. AS/NZS1547:2012 has been developed to ensure onsite domestic wastewater discharge is sustainable without environmental effect. Provided the system is designed to comply with this standard, detailed system design is not be necessary and any effect on the environment will be no more than minor.

2. Please clarify the proposed Lot sizes. The scheme plan shows Proposed Lot 1 as 2.1480ha and Proposed Lot 2 as 1.2000ha, however the application refers to "an occupied/ unoccupied site comprising of" 2133m² and 1215m² respectively, and the CGW report (section 9.1, page 10) refers to approximately 1.4ha for Proposed Lot 2.

The scheme plan supersedes any previous references and we can confirm the proposed Lot sizes are as follows: Lot 1 as 2.1480ha and Proposed Lot 2 as 1.2000ha.

3. Please provide an assessment of the effect of the proposal, the allotment size on the rural character and the desired environmental outcomes for this area. This should also include an assessment of cumulative effects/ adverse effects precedent.

The application has assessed the effects of the proposal on rural amenity and character and provided an assessment of surrounding lot sizes, and in this context the proposal is not out of character with its surroundings. We are not sure what the specific "desired environmental outcomes for this area" referenced relate to (beyond the policy matters to be addressed in point 4) but will apply the permitted baseline test to help determine the

limit of these outcomes. Under 95D(b) Council may disregard an adverse effect if a rule permits an activity with that effect. Under the relevant permitted rules for this test, any lot in this locality could contain <u>all</u> the following:

- A building if under 40m2 built up to the road boundary
- A dwelling
- An industrial building of no more than 300m2
- A commercial building of no more than 300m2
- Associated commercial parking with impervious surfaces to a total of 2,500m2
- In addition, buildings for animals or plants are not limited in area or site coverage
- the maximum permitted height of buildings is 12m

Clearly such a permitted activity as detailed above has the potential to create much greater adverse environmental effects than this application.

With regard to cumulative effects of small holdings within the Lud Valley it is not to the point where one more lot would make a significant adverse impact on the modified rural character of the Valley, the infrastructure or the privacy of adjoining neighbours.

Overall the effects are no more than minor and in terms of the existing environment likely to be insignificant. The fact those parties who adjoin the application site (and most likely to be most affected by any potential or actual adverse effects on the environment) have given their approval to the proposal provides further significant weight in support of this assessment.

4. Please provide a detailed assessment against the relevant objectives and policies, in particular RU2.ii b), RU2.2, RUr.2.5 and RU3.

"RU2.ii b) The Small Holdings Area is generally contained within valley floors or between urban development and the Rural Zone. The pattern of development is much greater in this area, with structures at more regular intervals, but still at a low level of density with significant areas of land in between. Small holdings are not rural residential areas, but are large enough to provide the opportunity for a range of rural activities. The character is predominantly rural rather than residential. Use of the land within this area is far more varied, with horticultural activities interspersed in between areas of grazing, and occasionally areas of indigenous vegetation particularly in the Lud and Teal Valleys... Since the plan was notified in 1996, there has been a trend of undersize subdivisions in the North Nelson Rural Zone and Rural Small Holdings area. A plan change was notified in 2005 to make undersize subdivisions between The Glen Road and Whangamoa Saddle non-complying activities. This is an interim measure to halt this trend and avoid further adverse effects on rural character, until such time as a more structured and coordinated framework for subdivision is in place. 05/01"

The Lud Valley area already exhibits the presence of rural small holdings due to the zoning provisions, there is no significant productive value remaining on the land in the neighbourhood and nor will the proposed subdivision affect such qualities. No new roads are proposed, the site is located in a small valley not readily viewed by the public and the

proposal accords exactly with the character of this valley as it is now and does not change the amenity in any adverse way. The reality of the situation is that the surrounding environment is not one which contains a range of rural and horticultural activities, and whatever the intention of the Plan this cannot be retrieved. The question that must be asked is what this subdivision does to the actual environment in which it is situated, again it is clear that any effect is no more than minor and in terms of the existing environment are likely to be insignificant.

It is clear from the above wording that Plan Change 05/01 does not preclude further subdivision but rather restricts it as a non-complying activity and only as a "stop gap" measure, typically such measures are expected to be settled within a two year timeframe.

Lawyer Nigel Mc Fadden made the following submission on non-complying subdivision of 60 Frost Road (RM 065371) hearing in 2007 regarding the undue delay in Plan Change 05/01 becoming operative;

"It appears however that Council is placing its dealing with 01/05 on hold as a means of protecting its position. That is not fair to the community, and it is not appropriate in terms of consideration of an application. The Courts have made it clear on many occasions that it is not appropriate to just leave matters, 'on hold"- peoples lives and their futures are under constraint as a result of the Plan Change, which appears that Council is not itself committed to."

A further 12 years have passed since Mr Mc Fadden made these comments, our understanding is that Plan Change 05/01 is still not operative, and we also understand that a structure plan for North Nelson has not been developed as proposed.

Given the above and that it was accepted by all parties that limited weight could be given to this Plan Change in 2007, we consider that in 2019, any Plan Change 5/01 policy or rule changes not operative and relevant to this application be given zero weight. Accordingly, we consider that this application should proceed, in effect as a discretionary status activity application.

RU2.2 Small land holdings should be of sufficient size to provide for:

- a) maintenance of general rural character and amenities,
- b) being visually unobtrusive, utilising topography to avoid visual impacts, and
- c) servicing from existing infrastructure, especially roads, and
- d) privacy and separation of dwellings, and
- e) containment of the adverse effects on site, especially to provide for on site sewage disposal, and
- f) avoidance or mitigation of natural hazards,

and should be in close proximity to the urban area of Nelson, to promote transport efficiency.

The land is physically zoned for these purposes it is therefore recognised as having these qualities. Given that Rule 78.3(b) is the underlying rule that was "deleted" by Plan Change

05/01 the proposed subdivision (by creating an additional lot no smaller than 1 hectare) has no difficulty in meeting these requirements and furthermore it meets the explanation and reasons for this policy.

With respect to an assessment of Policy **RU2.5**, any assessment against this policy is redundant given the status of Plan Change 01/05 as outlined above. With respect to **Policy RU3**, the site does not adjoin any lower density rural zones or productive land use activities. The proposed activities contained within this application are consistent with the surrounding environment. Again, this is evidenced by the applicants obtaining affected persons approval from all physically adjoining neighbours.

5. It appears that the application site does not currently have a ROW over Proposed ROW A and no information has been provided to demonstrate that ROW A to access Proposed Lot 2 has been agreed with the landowners and that legal access can be gained to the Lot. Please demonstrate that sufficient provision has been made for legal and physical access to each allotment to be created by the subdivision in accordance with s106(1)(c) of the RMA.

The ROW landowner (207 Lud Valley Road) have given their verbal approval to the applicants for legal access over their land. They have viewed the application detailing the ROW access arrangements and signed the affected party approval form and initialled the application scheme plan with the proposed ROW easements shown. The applicants will obtain further explicit written approval from the landowner, in the interim we ask that given the above, the application proceeds on the basis that sufficient interim provision has been made.

Earthworks & Proposed building areas

6. The CGW report provided envisages that major earthworks will be required to construct the access and proposed development and recommends that a slope stability analysis is undertaken. It is likely that the proposal would also require a further resource consent under rule RUr.27 Earthwork to form the driveway and building platform. It would be prudent to add this to your current application(s). Alternatively, you would need to obtain a separate consent at a later stage. Please address and advise how you wish to proceed.

For several reasons, it is not prudent to apply for consent for earthworks at this stage. As per section 3.5 of the application we have requested this be dealt with via consent condition.

7. From the information provided, I am unable to determine compliance or otherwise with rule RUr.28, in particular RUr.28.1.c) and e), however given the areas shown on the conceptual site plan (drawing no. 18360/03) it appears likely that the proposed dwelling, shed and temporary accommodation would not meet the setback and defensibly space requirements. Please either demonstrate compliance by providing setback measurements or add these rule breaches to your current application(s). Alternatively, you would need to obtain a separate land use consent at a later stage.

The only building considered to be in potential breach of the applicable setback of requirements is the proposed shed. We can confirm the proposed shed has been removed from this application. With regard to defensible space for fire protection and water storage there is sufficient space for these rules to be complied with and this will be detailed at the building consent stage.

8. Your application seeks to address water and firefighting provisions via appropriate consent conditions/ notice. Please confirm that you are volunteering appropriate consent conditions/ consent notice, i.e. that any future building on Proposed Lot would comply with the provisions of rules RUr.28.1.f) and g) and the New Zealand Fire service Firefighting Code of Practice.

Yes we can confirm we are volunteering the appropriate consent condition/notice.

Access

9. Please demonstrate compliance with rule RUr.36.

As shown in Figures 5 and 6 of the application sight lines both north and south are excellent. Distances are shown below:



The vehicle crossing will be upgraded to meet the applicable standard and an appropriate consent condition is volunteered. On site detailed design matters are not available nor considered necessary at this stage given the conclusions provided by the CGW geotechnical site suitability report.

10. Please provide a more detailed assessment of the existing and proposed ROW, including number of current and proposed users, width, gradient etc. and demonstrate whether or not the ROWs comply with all of the minimum requirements/ access standards of the Nelson Tasman Land Development Manual 2019 (Table 4-13 etc.). If

the ROWs do not meet all LDM requirements, please specify/ quantify any non-compliances and provide an assessment including reasons why you consider them to be acceptable.

The proposed existing ROW, as shown in Figure 5 and 6 and detailed in section 3.2 of the application, is a 3.5 m formed and sealed ROW that meets or exceeds all applicable design standards. The number of current users is 4 and the proposal will increase this by 1.

Stormwater

11. It is proposed to direct runoff from the developed area on Proposed Lot 2 into a 5,000l detainment tank and then into the stream via a pipe. This requires an additional discharge permit under rule FWr.22. It would be prudent to add this to your current application(s). Alternatively, you would need to obtain a separate consent at a later stage. Please address and advise how you wish to proceed.

Please note: the installation of an outlet structure in the stream, including erosion protection is not a permitted activity either and would require consent under section 13 of the RMA.

Please refer to the attached response from Flow Environments Ltd water and wastewater engineer David Carlson-McColl CP.Eng .

Wastewater discharge

12. The tests pits used to determine the soil type/ category of the disposal area are located outside the area proposed for the wastewater field. Please provide a soil evaluation, including soil investigations of the actual disposal area (Note: as per ANZS1547:2012 a detailed subsoil investigation shall examine and record the soil profile and solid features within the expected available areas).

Please refer to attached response from Flow Environments Ltd water and wastewater engineer David Carlson-McColl CP.Eng .

- 13. As noted in the CGW report, all elements of the proposed onsite wastewater management system require detailed design this inform is required for Council to process the discharge permit, please provide. In particular, the following information is required: a. Proposed effluent quality for secondary treatment (BOD₅, TSS) and location of a sampling point;
- b. Tank size;
- c. Exact location of the proposed disposal field and reserve area, including proposed drip line layout;
- d. Setback from nearest water body (I note the report, and FWr.291. recommend a minimum setback of 20m, but no exact measurement/ setback has been provided);
- e. Distance to nearest other disposal field, incl. existing field on Propose Lot 1;
- f. Distance to nearest bore;
- g. The requirement for and location of stormwater cut off drains;
- h. The requirement for visual and audible alarms;

- i. Recommendations/ requirements for vegetation cover of the field;
- j. Maintenance requirements & frequency.

Please refer to attached response from Flow Environments Ltd water and wastewater engineer David Carlson-McColl CP.Eng .

14. I note that the proposed flow allowance for the site water supply is reliant on the new dwelling on Proposed Lot 2 being fitted with water reduction fixtures ("CGW understand that water saving appliances will be installed"). Please confirm that you are offering this proposed mitigation measure as a condition of consent and note that the fixtures would need to be maintained to ensure the discharge volume limit is met. Otherwise the flow allowance would need to be increased to 200l per person per day.

Please refer to attached response from Flow Environments Ltd water and waste water engineer David Carlson-McColl CP.Eng .

15. The CGW report (page 13) states: "it is proposed that sub-surface pressure compensating drip line is used to distribute treated effluent, installed a 1m interval perpendicular to the slope." 1m is a typical line spacing – please provide an assessment from your geo-professional whether this should be increased, given the steep slope of the disposal area.

Please refer to attached response from CGW Ltd geotechnical engineer Kylie Johnson.

Geotech

- 16. Cameron Gibson Well (CGW) 'Site Features and Investigation Location Plan' highlights shallow instability is present within the upslope area of the proposed disposal fields location. The CGW report also describes the area as "waning slope with several undulations". Review of TP2 log, located in the area of the proposed disposal field describes the presence of 'high plastic' materials. The report states that no ground water was encountered, however, TP2 log describes soils encountered to be 'wet' above the contact with bedrock. All the above information is an indication the area has a history of slope instability and would be very sensitive to change of site conditions.
- a. Please provide commentary from your Geo-professional that address the concerns raised above as to the suitability of the area for installing a disposal fields.
- b. If the area is still deemed a suitable location for installing the proposed disposal field, please provide the following:
- i) A geological cross-section through the steepest section of the proposed disposal field. The cross-section should extend up and down slope to capture the crest and toe.
- ii) Results of slope stability analysis and commentary from the Geo-professional.

Please refer to attached response from CGW Ltd geotechnical engineer Kylie Johnson.

Further to this response we note CGW have undertaken a site assessment for onsite wastewater disposal in accordance with AS/NZS1547:2012. Their professional geotechnical conclusion is that, subject to their recommendations, the site is considered suitable for effluent disposal using subsurface drip irrigation at a maximum rate of 1.5mm/day. This view is also supported by experienced waste water engineer David

Carlson McColl CP.Eng, of Flow Environments Ltd. We note both David Carlson-McColl and Kylie Johnson of CGW Ltd have been to site and unlike Council engineering staff they have visually inspected the stability of the ground and the soil conditions. Therefore, they have a better appreciation and understanding of the suitability of the site for wastewater disposal as they do not have to hypothesise on the indications of slope stability solely by making inferences from a desktop study of available information. From a planning point of view when two suitably qualified geotechnical and waste water engineers are satisfied the site is suitable for waste water disposal, in areas not visually exhibiting any history of shallow soil instability, for a 3 bedroom dwelling for 2 people with low flow appliances, and subject to further detailed engineering system type and dripline layout design approval, as well as the building consent process, then in such circumstances, any further request for a cross section and slope stability analysis for waste water, is not justified.

In our view, the request for such detail significantly exceeds the scale and significance of the effects that the activity may have on the environment and as such falls outside the scope of the RMA. We would urge Council engineering staff to directly contact both David and Kylie if they require further technical clarification on this matter.

Duration for wastewater discharge permit

17. Please specify the duration of consent you wish to apply for. Note: the serviceable life span required under AS/NZS 1547:2012, On-site domestic-wastewater management, Section 6.2.1 is 15 years. If the system has been designed by an Engineer to the above standard and in line with the Building Code then the minimum serviceable life must be 15 years. If the applicant wants resource consent for longer than this duration then the disposal field must be designed for this and supported with a statement from the Engineer to this effect.

We can confirm the discharge consent duration being applied for is 15 years.

We trust that this response provides Council with sufficient information to proceed with the processing of these applications, should you require further information we would request in the first instance you informally contact us to discuss.

Yours sincerely,

Courtenay Isherwood

51/L /

BRS, PG Dip Soc Sci, PG Dip T&L

Assoc. NZPI

Director

Isherwood Consultants Ltd