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Application for Resource Consent

Subdivision of Land & Discharge Permit at 205 Lud Valley Road, Hira

Isherwood CONSULTANTS
Environmental & Resource Management

Application for Resource Consent:

Subdivision of Land & Discharge Permit at 205 Lud Valley Road, Hira

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Date:	August 2019
Reference:	0012
Status:	**Final**

Isherwood CONSULTANTS
Environmental & Resource Management

Application for resource consent

To: Nelson City Council
Civic House, 110 Trafalgar St, Nelson
PO Box 645,
Nelson, 704

From:

1. The Vincent's are applying for the following types of resource consent:

RMA Section	Activity	Period Sought
11 (1)	Subdivision consent to create 1 additional lot and associated easements.	Unlimited
15 (1)	Discharge permit for the disposal of wastewater to ground	Unlimited
	Overall, the activity has been assessed as a **non-complying activity.**	

2. A description to which the application relates:

The application relates to the subdivision of a 3.3480 ha allotment creating 1 additional allotment and associated servicing easements. The additional allotment created is intended to be built on, and the application is bundled with a discharge permit application.

The names and addresses of the owners and occupiers of the land to which the application relates:
Andrea Mary Vincent and William Paul Vincent
205 Lud Valley Road, Hira

The location to which the application relates is:
The land is legally described as Lot 1 DP 18871 and is located at 205 Lud Valley Road, Hira

3. **The following additional resource consents are required in relation to the proposal and will be applied for:**
   No other consents are required at this stage, earthworks consent for access and building platform will be applied for if required at a later stage.

4. **Attached, in accordance with the Fourth Schedule of the Resource Management Act 1991, is a description of the proposed activity and an assessment of the environmental effects the proposed activity may have on the environment.**

5. **Attached is any information required to be included in the application by the district plan, the Resource Management Act 1991, or any regulation made under that Act.**

Signature of applicant (or person authorised to sign on behalf of the applicant)

30/08/2019
Date

Address for service:
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Nelson 7011
Attn: Courtenay Isherwood
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1 Introduction

It is proposed to subdivide the site, legally described as Lot 1 DP 18871 to create 1 additional lot. The applicants intend to develop the site and build a dwelling and shed/garage on the newly created lot. In anticipation of these activities the applicant is also applying for a discharge permit for waste water to provide greater certainty for Council.

The site is zoned Rural - Lower Density Small Holdings Area as shown on Nelson Resource Management Plan (NRMP) Planning Map 49. Subdivision of Lot 1 DP 18871 to create an additional lot will create two lots smaller than the 3 ha minimum net area for allotments in this zone.

Overall, the proposed subdivision and associated discharge activities have been assessed as a non-complying activity under the NRMP as the new lots will be under the minimum lot size for the area.

A description and assessment of the activity, including an assessment of the actual and potential effects on the environment is contained in this application pursuant to Section 88 and Schedule 4 of the RMA.

The following appendices are attached:

Appendix I Heaphy Surveying Ltd Application Plan

Appendix II CGW Ltd Site Suitability Report

Appendix III Certificate of Title

Appendix IV Affected Persons Approval Forms

2 Site and Surrounding Environment Description

Figure 1: Site Location

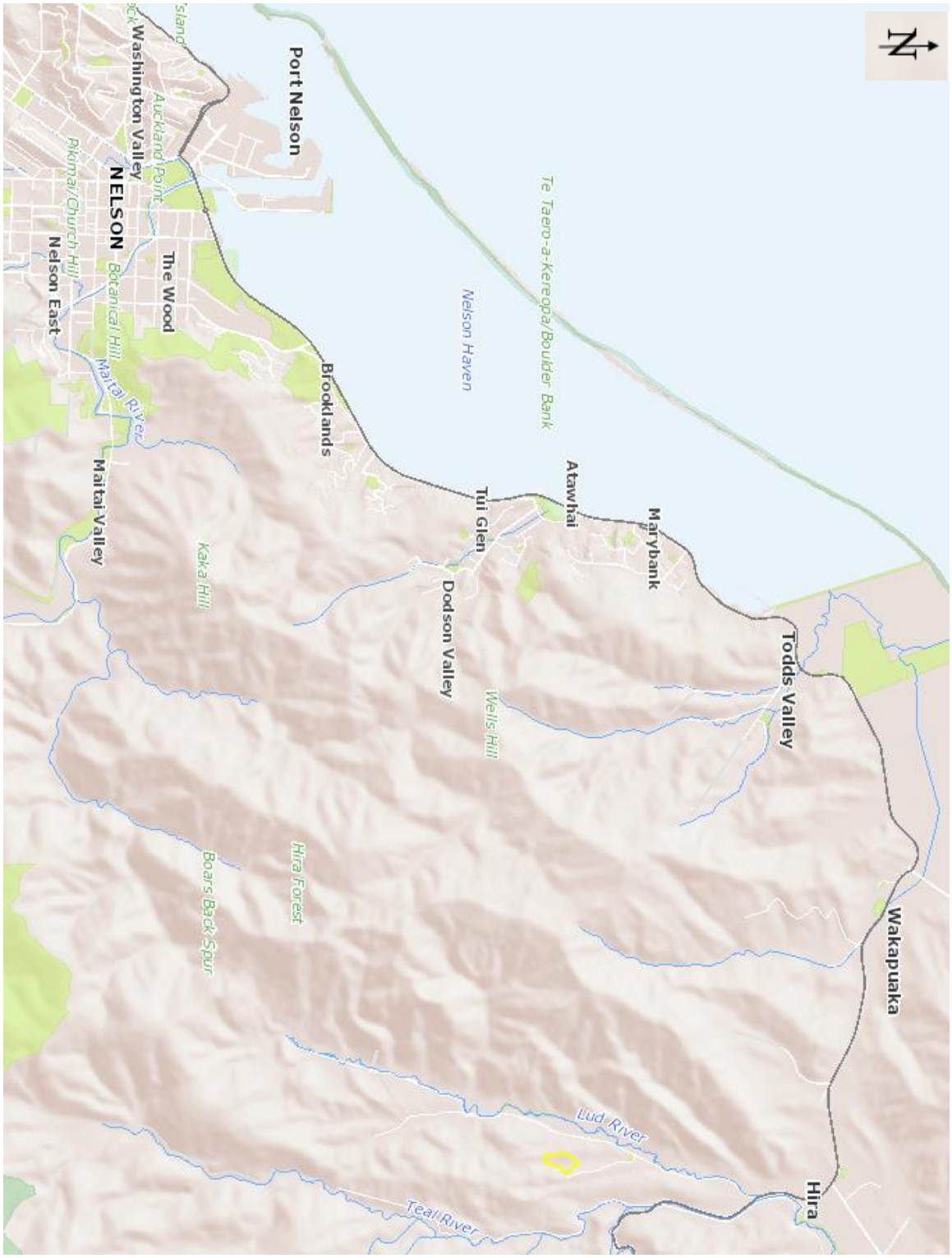

Figure 2, Site Location; wider context

The site is situated approximately 2 kilometres to the south of the township of Hira with a physical address of 205 Lud Valley Road. The site is accessible via an existing right of way from Lud Valley Road which is visible in Figure 1. Lud Valley Road is defined as a local road in the NRMP roading hierarchy.

The site comprises a total area of 3.3480 ha. The topography of the site is steep sloping land with a north west aspect and an estimated gradient of 25% down towards an unnamed stream. The stream generally follows the eastern boundary before heading through the middle of the site exiting at the most northern point of the site. The land on the eastern side of the stream is covered in bush and slopes steeply towards the end of Frost Road. The highest points of elevation are the south western corner and the eastern most point on the far side of the stream at the end of Frost Road.

The northern half of the site has existing residential development. This development is in the form of a relocated timber house that is currently occupied by the applicants, a large multi vehicle garage and associated gardens. The right of way that enters the site on the western boundary weaves down the hill to a large turning area next to the house.

The immediate surrounding environment in all directions is high density by rural standards, with the main land use in the area being lifestyle blocks. This higher density reflects the limited productive value of this land due to topography. Many of the surrounding lots are under the 3Ha minimum for the lower density small holdings zone, with numerous lots under 2ha, and a number being smaller than 1.5ha, including:

6 Frost Road	0.2420 ha
42 Frost Road	1.2490 ha
55 Frost Road	1.1890 ha
58 Frost Road	1.0300 ha
60 Frost Road	1.0300 ha
27 Lud Valley Road	0.6916 ha
135 Lud Valley Road	0.4980 ha
265 Lud Valley Road	1.0016 ha

In the wider vicinity there are areas of commercial forestry but there are no nearby intensive agricultural or horticultural operations, with all the land use in the vicinity of the site being lifestyle blocks.

3 Proposal

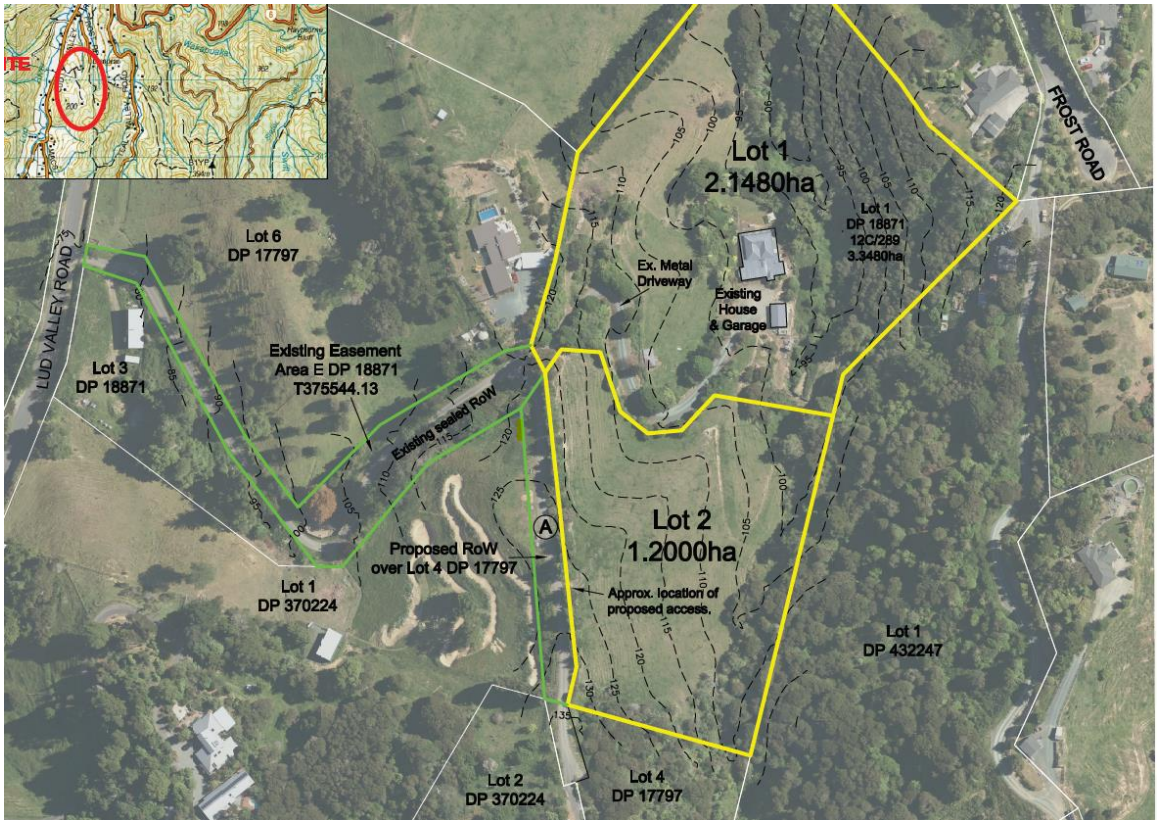

Figure 3 Proposed Subdivision

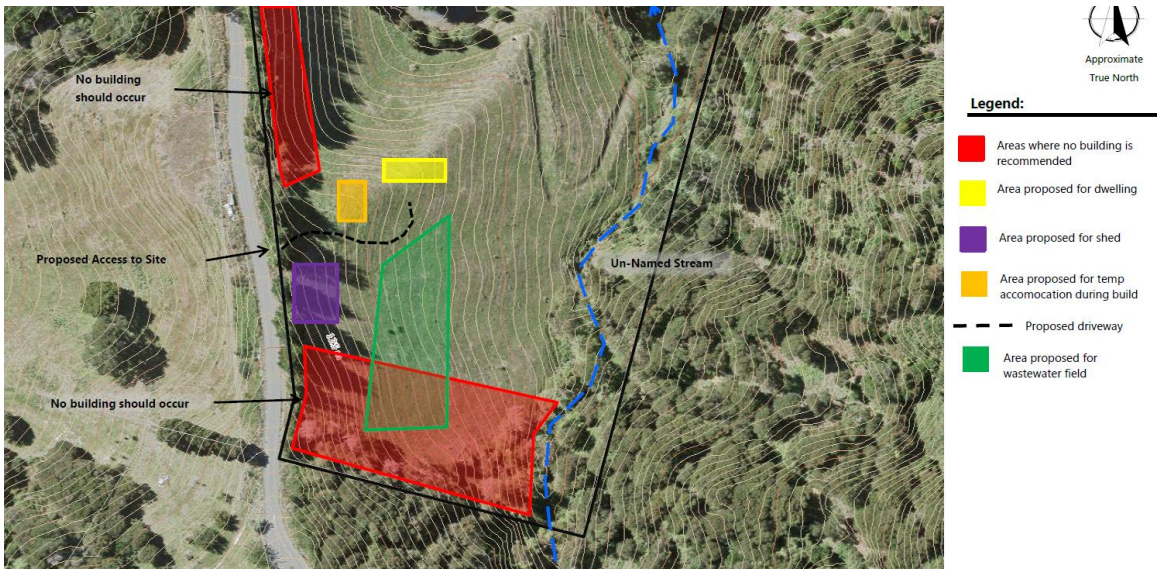

Figure 4 Proposed building locations (See CGW Site Suitability Report)

The proposal involves the subdivision of Lot 1 DP 18871 to create 1 additional allotment:

Proposed Lot 2: An unoccupied site comprising of 1215m2.

3.1 Development

The proposed development for the site includes an off grid eco single storey. A shed with a dirt or gravel floor and a lightweight construction is also proposed in the same location. A driveway is proposed to be constructed to provide access from the edge of the site to the new dwelling and shed. Figure 4 shows the proposed building locations and access. This plan is taken from drawing 18360/03 of the CGW Site Suitability report attached as Appendix II. which will be built into the hill side on the ridgeline in the middle of the sloping land in the southern lot.

3.2 Access

Ingress and egress to Lot 2 will be via the existing right of way to the west of the site. This is a shared access way that is already used to access three existing dwellings. Good sights lines both ways are shown at the proposed vehicle crossing onto the ROW in Figures 4 and 5 below.

Figure 5 Sight lines south ROW

Figure 6 Sight line north ROW

3.3 Stormwater

There are no Nelson City Council (NCC) owned network services for the proposed development area but there is an unnamed stream which flows through the site towards the Lud River. Discharge of stormwater into a stream is a permitted activity provided the discharge complies with conditions in the NCC Land Development Manual (LDM). This includes ensuring that there is no erosion resulting from the discharge and no items are placed in the stream.

The area which is to be covered by impervious surfaces as a result of development on the site has not been finalised but as already mentioned will include a house, shed and gravel driveway estimated to cover a total of 700 m^2. These impervious surfaces will increase the rate of stormwater runoff from the site.

The impact that the development on the site will have on runoff rates was calculated by Cameron Gibson and Wells (CGW) Consulting Engineers. CGW used the 700m^2 estimate for increases in impervious surfaces in conjunction with runoff coefficients and rainfall intensities in accordance with the Land Information Memorandum (LIM) Report. They calculated the run off rates pre and post development as well as post development using a 2.6m high tank with a 25mm outlet pipe to detain the flow from the developed area. These calculations were made for rainfall events of different likelihoods from 10% annual exceedance probability (AEP) to 2% AEP.

The calculations undertaken by CGW found that it was possible to fully compensate for the additional runoff from the proposed development using a rain tank with a restricted orifice to detain water for 10% and 6.67% AEP events. However, using the same system during a 2% AEP event runoff will exceed the predevelopment rate by approximately 0.4L/s with a total of approximately 4000L of water having to be stored. The additional 0.4L/s is considered insignificant in the wider Lud Valley catchment. These calculations determined that a 5000L tank is required for detainment of runoff from the developed area. The detailed proposed stormwater management system will be designed in detail once the site layout is confirmed but the tank detainment system is the stormwater system that is proposed for the site.

3.4 Wastewater

Plans for the proposed development are yet to be finalised but it's likely that the total load for onsite wastewater disposal will be equivalent to a four-bedroom house. Subsurface drip irrigation is the proposed method of treated effluent disposal at the site due to the soil type and relatively steep nature of the site. It is proposed that a packaged treatment plant capable of treating effluent secondary treatment standards in accordance with AS/NZS1547:2012 is used. The

disposal field is required to be 880 m^2 and will be situated at the southern end of the site following the recommendations of CGW.

It is acknowledged that for a permitted activity FWr.29 requires a minimum separation distance of 20m between an effluent disposal field and a waterway or a boundary. The nominated disposal field includes this allowance for distance from a waterway but not for a boundary. The 20m distance between boundary and disposal field is considered excessive for this site as there is a low rate of disposal and the boundary is upslope of the disposal field. AS/NZS1547:2012 Table R1 notes that a minimum setback of 0.5m can be applied between a dripline system and an upslope boundary where the slope is greater than 5% as is the case for this proposal.

3.5 Earthworks

While no required as part of this application, when development does proceed, earthworks will be required for the site to form the driveway as well as the building platform for the dwelling which will be built into the hillside in the middle of the new lot. The proposed location for the dwelling has been determined by CGW as competent rock and the area proposed is predicted to be shallow meaning that the slope will be more stable. The dwelling requires cut earthworks to form the building platform and retaining structures will be used where the cut is greater than 1m. The driveway requires major earthworks including a potential retaining wall where it travels down the slope. An accurate survey will have to be undertaken before the driveway can be designed in detail but it will also use retaining structures where the cut is greater than 1m. Given that CGW have undertaken preliminary geotechnical investigations and are satisfied that the site building area and access way is suitable for residential development then we request a suitable subdivision condition for earthworks design and landuse consent be the mechanism for Council to address this matter.

3.6 Water and Firefighting

There is a local community reticulated water scheme but our understanding is that there is no current capacity for new connections at thistime although if this changes the applicant will apply to join the scheme. It is therefore proposed that potable and firefighting water will be sourced from appropriately sized roof tanks. The size and design on the tanks will depend on the size of the roof area and if sprinklers are to be installed which is requested to be addressed via appropriate consent condition/notice.

3.7 Telecommunications and Power

Connection to power and telecommunications services are available at the boundary, however in keeping with the eco self-sufficient design vision the applicant is proposing not to connect to these services but source power off the grid and telecommunications via rural broadband and cellular service.

Proposed Lot 1: An occupied site containing an existing residential dwelling and associated structures comprising of 2133m^2.

The existing dwelling and associated structures contained within proposed Lot 1 will be retained. Access will continue to be via the existing formed ROW. All services are currently connected and available on site supplying the existing dwelling.

4 Consideration of Alternatives

The application relates to a private block of land and any potential or actual adverse effects of the proposal have been assessed as no more than minor. As the activity will not have any significant adverse effects (as per Schedule 4 of the RMA) no alternative locations or methods are required to be assessed.

5 Non-Compliances with the NRMP

Section 11of the RMA states that:

> *"(1) No person may subdivide land, within the meaning of section 218, unless the subdivision is—*
> *(a) Expressly allowed by a rule in a district plan and in any relevant proposed district plan or a resource consent, and a survey plan relating to the subdivision has in accordance with Part 10—*
> *(i) Been deposited by a District Land Registrar or a Registrar of Deeds; […]"*

The proposed subdivision of land has been assessed as a non-complying activity as it does not meet the condition of a controlled activity stated in RUr.78.2 that the minimum lot size in the Lower Density Small Holdings Area is 3ha.

Therefore, subdivision consent for a non-complying activity is required pursuant to Section 11(1)(a).

Section 15 of the RMA states that:

> *(1) No person may discharge any—*
> *(a) contaminant or water into water; or*
> *(b) contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or*
> *(c) contaminant from any industrial or trade premises into air; or*
> *(d) contaminant from any industrial or trade premises onto or into land—*
> *unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.*

The discharge of wastewater contaminants to land is not a permitted activity in the Nelson Region for the proposal site. Under FWr.29 Establishment of, and discharges to, effluent disposal fields, any discharge fields on lot sizes smaller than 15ha are a discretionary activity.

Therefore, a wastewater discharge permit for a discretionary activity is required pursuant to Section 15 (1).

6 Assessment of Actual or Potential Environmental Effects

S88 2 (b) of the RMA states that an application must include:

> *"an assessment of environmental effects in such detail as corresponds with the scale and significance of the effects that the activity may have on the environment."*

6.1 Effects on Traffic

An increase in residential density of a site has the potential to increase traffic generation, reduce amenity values and create road network safety effects.

The proposal will allow for 1 additional dwelling on the site. It is generally accepted that a residential urban dwelling generates 8-10 vehicle movements per day. Given the rural setting of this site, and generally lower movement numbers per dwelling, we consider an increase of 8 vehicle movement per day to be an appropriate likely figure.

Egress and ingress onto the legal road; Lud Valley Road, is via an existing right of way which currently services 3 dwellings. Sight line onto the right of way and good in both directions for the speed and traffic volumes. This right of way is sealed with a formation width of 3.5m.

Given the low increase in numbers of vehicle movements (8) resulting from the proposal, the low number of existing vehicle movements on the right of way, and the good formed design of the right of way, any adverse traffic effects of the proposal on the environment are considered to be less than minor.

6.2 Effects on Amenity Values

An increase in residential density of a site has the potential to adversely affect amenity values. Amenity values as defined in the NRMP means those "natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes".

For context we refer Council to Section 2 of this application, detailing the number of surrounding existing lots under 1.5ha size, and the predominate land use activities and character of the surrounding environment. As such, while the proposed lot sizes resulting from this subdivision will not be able to achieve the minimum size standard, the proposal is considered to retain the character of the surrounding area.

The provision of a BLA will enable a compliant dwelling to be built and provides certainty in respect to location for Council regarding any assessment of amenity and character effects. The BLA is located off the ridgeline beneath the existing ROW reducing visual dominance.

The BLA's location will ensure separation and privacy is maintained from the existing dwelling on Lot 1.

Figure 7 BLA View North

Figure 8 BLA View South

Figure 9 BLA View West

Figure 10 BLA View East (note the elevation below ridgeline)

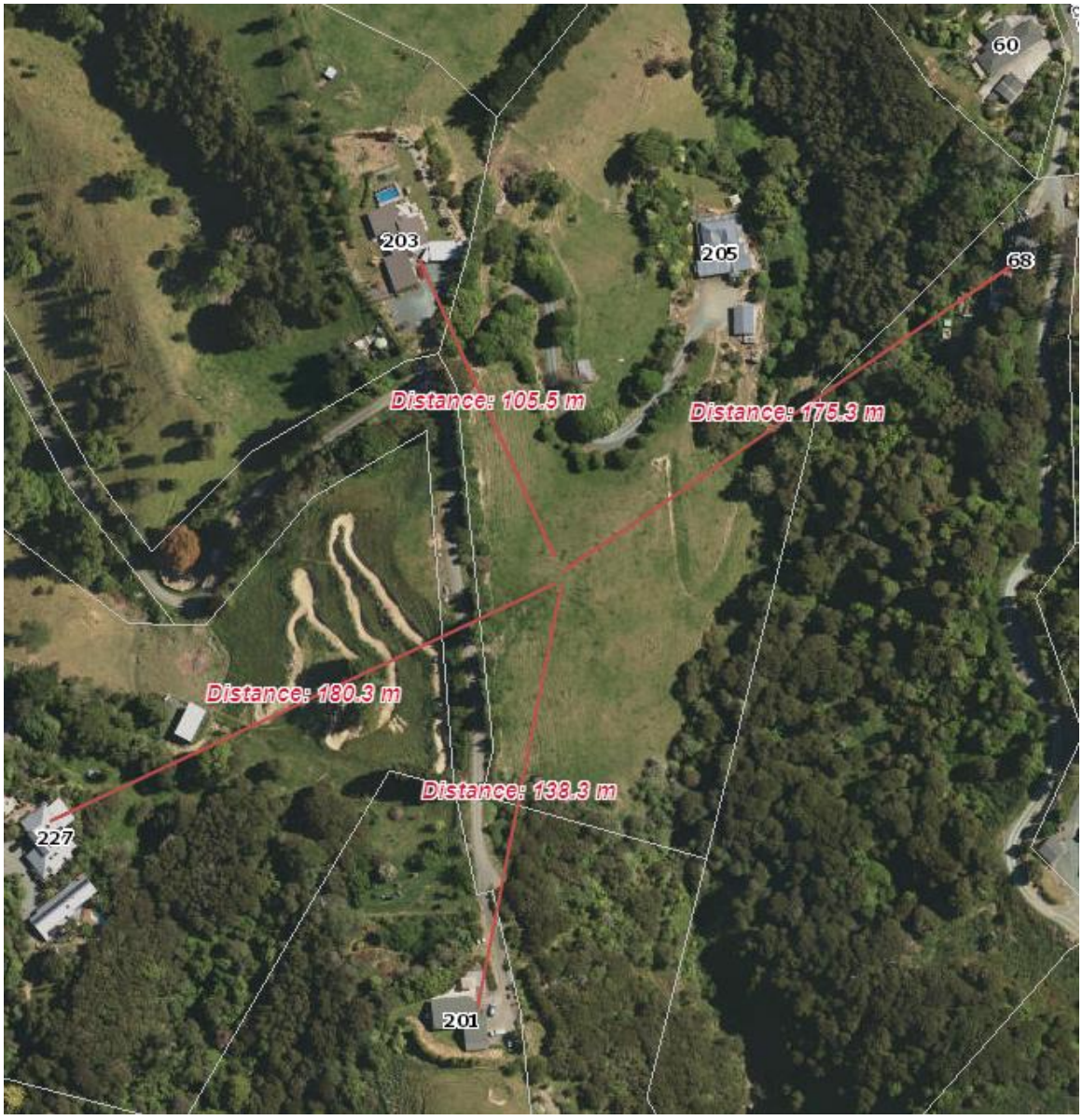

Figure 11 S95 Potentially Affected Parties

An assessment was undertaken of the potentially affected neighbours due to adverse amenity or character effects resulting from the proposal. Those considered potentially affected are shown above in Figure 11 and although not measured in Figure 11 above due to considerable distance to dwelling, 201 Lud Valley Road is considered potentially affected due to adjoining southern boundary of the site.

68 Frost Road was the only property assessed on Frost Road due to the potential lack of privacy and separation from the BLA and their dominant views to the south west onto the BLA. We note 60, 70,72, and 73 Frost Road were not assessed due to any potential effect considered de minimis due to distance from the BLA, the typography of the application site which rises steeply some 50meters in elevation over a distance of 100meters of native bush acting as a buffer zone for separation and privacy, lack of any views from these properties onto the BLA and their dwelling orientation and dominant views to the north and west, a different valley system which dictated that further analysis and assessment was not required.

Of those identified as potentially affected, the following have given their written approval and are attached as Appendix IV:

68 Frost Rd
201 Lud Valley Road
203 Lud Valley Road
207 Lud Valley Road

This leaves 227 Frost Road as being considered potentially affected and requiring assessment. 227 Frost Road contains a dwelling that is located approximately 180 meters to the west of the BLA. The two site boundaries do not adjoin but are separated by a ROW. While the proposal will result in an increase in vehicle movements along this right of way, the low number of increased movements together with the distance from the dwelling means that any adverse amenity effects resulting from traffic will be less than minor. The BLA cannot be seen from 227 Frost Road, the site is screened along this boundary but the BLA is also located well below the ridge line of the ROW, so cannot be seen even if this screening did not exist. The typography of 227 Frost Road which rises steeply to the east in the direction of the application site, further mitigates any potential effect by orientating the dominant views of 227 out towards the lower land and Lud Valley to the west. Taken the above into consideration any effect from the proposal on 227 Frost Road is considered to be less than minor.

Taking into account the surrounding character and context and the distances and limited view shafts onto the BLA that are available, it is considered that the proposal is an anticipated and reasonable activity in this context and that any actual or potential adverse effects on amenity or character values will be less than minor.

6.3 Wastewater Effects on Land and Water Quality

An increase in the residential density of a site has the potential to increase wastewater to ground and adversely affect land and water quality.

The applicant is following the recommendations of an expert geo technic report from CGW Consulting Engineers to design a waste water solution for the site that will mitigate any adverse effects on the environment.

The recommendations are to use a packaged treatment plant capable of treating effluent to secondary treatment standards in accordance with AS/NZS1547:2012. It is recommended to dispose of the treated wastewater via subsurface drip irrigation in a disposal field in the southern section of the site. The system has been designed using conservative estimates for wastewater production so that it will easily cater for the actual production of the new dwelling. The disposal field is a large area especially compared to the small amount of wastewater that is estimated to be disposed in field meaning that any adverse effects on land quality and stability will be mitigated. The system is using a packaged treatment plant meaning that the disposed wastewater will be of good enough quality to not have any effect on site water quality.

Given the conservative estimates and the over designed system as well as the expert nature of the recommendations, wastewater effects from the proposal are considered to have a no more than minor effect on the environment.

6.4 Storm water Effects on Land and Water Quality and Flooding

An increase in residential density and associated increase in roof and hardstand areas has the potential to concentrate storm water flows and contaminants, and adversely affect soil and water quality and have downstream flooding and ponding effects.

The applicant is following the recommendations of an expert geo technic report from CGW Consulting Engineers to design a storm water solution for the site that will mitigate any adverse effects on the environment.

It was stated by CGW that as the proposed development is only altering a small area of the total site there will be a minimal effect on stormwater runoff. Their recommendations were to use a tank detainment system with a controlled outflow to further minimise the impacts of the development. All runoff from the developed area of the site will be directed into a 5000L tank and discharged into the stream which passes through the site at a controlled rate. The outlet from the

tank will be piped the entire distance to the stream and diverted to existing rocks on the stream bed. Controlling the rate of discharge will mitigate any erosion in the gully downstream and piping the water directly to the stream will mitigate effects to the land on site. Calculations by CGW found that a 2% AEP event (should occur once every 50 years) using the proposed system would require 4000 L of storage 1000 L less than the proposed tank and have a negligible effect on runoff rates. Implementing the proposed system for stormwater control will mean that there will be a minimal increase in surface flow over the site in storm events and accelerated soil erosion will be mitigated.

Given the above mitigation measures any storm water effects on the environment are considered no more than minor.

6.5 Earthworks effects on soil stability and erosion

The excavation, fill and construction on the site has the potential to create short and long term adverse effects on soil stability and erosion of land.

While no significant earthworks requiring consent are proposed as part of this application Council requires certainty that a suitable accessway and building platform had be safely formed on the site. The applicant is following the recommendations of an expert geo technic report from CGW Consulting Engineers in regard to the earthworks that need to be undertaken to facilitate the proposed future development for the site.

CGW stated in the conclusion of their report that:

"CGW recommend the site is suitable for the building of the proposed development, provided the recommendations for building location, retaining and earthworks are undertaken. Site specific slope analysis should be completed prior to detailed design."

CGW found that the site was suitable for the proposed development and have highlighted where on the site development should be located in order to mitigate any short or long term effects on soil stability. They have also provided drawings which show where no building is recommended to occur. The proposed dwelling and driveway will be built according to the recommendations of CGW and a detailed survey and slope stability report will be conducted prior to the detailed designs of the development being completed. In following the recommendations of CGW the earthworks required for development of the site will mitigate any effects the earthworks may have on soil stability and erosion. The dwelling location has been determined according

to where the competent rock is predicted to be shallow and the earthworks will have the least effect on soil stability.

Overall, providing the recommendations of the CGW geo technical report are implemented, any earthwork effects on soil stability and erosion are considered no more than minor.

7 NRPS and NRMP Objectives and Policies

The Objectives and Policies of the NRPS are mirrored in the NRMP

The Objectives and Policies of the NRMP have been considered. The most relevant objectives and policies of the Proposed District Plan relate to those contained within the following chapters:

- Chapter 5: District Wide Objectives and Policies, most notably DO10, DO13, DO14, DO 17 and DO 19.

- Chapter 12 Rural Zone Objectives and Policies

Considering the conclusions reached in the Assessment of Effects and the physical existing context of the surrounding rural residential land development in this zone, the proposal is consistent with the above objectives and policies of the NRMP.

8 Resource Management Act 1991

All applications for resource consent must be considered subject to Part II of the Resource Management Act 1991 (the RMA).

The purpose of the RMA is to promote the sustainable management of resources at a rate that enables people to provide for their economic and social wellbeing while avoiding, remedying or mitigating effects.

The matters of Part II most relevant to this proposal are contained within Section 7. Section 7 sets out those other matters that Council is to have particular regard to in achieving the purpose of the RMA. Section 7 (b) 'the efficient use and development of physical and natural resources' is considered especially relevant to the proposal given the current under utilisation of the land resource and the

logical, integrated and consolidated effect the subdivision will have in regard to appropriate sustainable growth in the area.

It is considered that the granting of consent for the activity proposed will achieve the purpose of the RMA, particularly in relation to the efficient use and development of the land resource.

9 Conclusion

The Vincent's are applying for a resource consent to subdivide the site, legally described as Lot 1 DP 18871 to create 1 additional lot at 205 Lud Valley Road, Hira. Additionally, they are applying for a discharge permit for the disposal of wastewater to ground.

Overall the proposal has been assessed as a non-complying activity under the NRMP.

Overall, our assessment of environmental effects finds that any adverse effects arsing from the proposal will be no more than minor. It is considered that the proposal is consistent with the objectives and policies of the NRMP and will achieve the purpose of the Resource Management Act 1991.

Accordingly, it is considered that the proposal can be granted pursuant to section 104(D) of the Resource Management Act 1991.

Appendix I

Subdivision Consent Application Plan

Appendix II

CGW Site Suitability Report

Appendix III

Certificate of Title

Appendix IV

Affected Person Approval Forms