File No.: 44214

29 August 2025

Buller District Council
PO Box 21
WESTPORT 7866

Attention: Jess Hollis

Email: jessica@hollisplanning.co.nz

Dear Jess

[illegible]

The following is in response to the Section 92 further information request letter dated 21 February 2025 for the subdivision being undertaken by John Raymond McLaughlin at State Highway 6, Addisons/ Virgin Flat.

Italicised wording has been taken from the Section 92 further information request letter. Responses are provided in non-italicised wording.

The following appendices are attached to the response:
[illegible] Scheme Plan with contour plan
[illegible] Civil Report
[illegible] Detailed Site Investigation
[illegible] Updated Geotechnical Site Plan
[illegible] Buller Electricity Affected Party Approval
[illegible] Ecological Report
[illegible] Landscape Report
[illegible] Certificate for DP 360520
[illegible] NZTA Affected Party Approval
[illegible] Updated list of easements
[illegible] Land Transfer Plan 513448
[illegible] Buller Electricity Limited Quote
[illegible] Chorus NZ Quote

Plans

1. Provide updated/additional plans containing sufficient information, including that required under Section 13.2.1 of the Buller District Plan, to adequately define:

a) contours (based on mean sea level NZVD 2016) at an interval sufficient for the design of roads/access, stormwater infrastructure and building platform levels, and to show the general topography of the area, particularly around proposed building platforms;

The Scheme Plan attached as **Appendix A** includes a plan showing the contours of the site. The contours are based on NZVD 2016.

Stormwater infrastructure for the road will be provided as part of the engineering design for the construction of the road. Design of the road will be submitted to Buller District Council and approved by Buller District Council prior to construction. Stormwater management for building development will be undertaken at time of building development occurring and as per the Civil Report attached as **Appendix B**.

The Building Location Areas (BLAs) outlined in the geotechnical report for subdivision are indicative only, demonstrating that a suitable building site is available on each allotment. As noted in the Statement of Professional Opinion appended to the Geotechnical Report, the lots will be subject to further detailed assessment at the time of building consent. A site-specific geotechnical assessment will be required at the building consent stage for all lots to ensure compliance with relevant standards and to address site-specific conditions. Therefore, no building platform levels have been provided as part of this response. Building platforms will be set at time of building development occurring on each allotment. The civil report attached as **Appendix B** includes the flood mapping results of a 2D stormwater model. All indicative building location areas identified on the Geotechnical Site Plan are located outside of the identified flow paths shown in the civil report.

The aerial imagery included on the Scheme Plan, the contour plan attached to the scheme plan, the Geotechnical Site Plan and the various reports attached to this response show the general topography and vegetation of the site.

b) the site constraints, including uncertified fill, identified in the report titled "Geotechnical Report for Subdivision," prepared by Davis Ogilvie;

A Detailed Site Investigation has been undertaken by Davis Ogilvie's Environmental Team and is attached as **Appendix C**. The area of uncontrolled fill identified by the Detailed Site Investigation is shown on the updated Geotechnical Site Plan attached as **Appendix D**.

c) *proposed/potential building platform locations on each lot that align with the test pit locations from the report titled "Geotechnical Report for Subdivision," prepared by Davis Ogilvie, and are located clear of any existing or proposed easements and setback requirements from easements (e.g. electricity infrastructure setbacks);*

As stated under point 1(a) above, the BLAs outlined in the geotechnical report for subdivision are indicative only and subject to further detailed assessment. Furthermore, it is noted in the geotechnical report that the test pits are intentionally adjacent to the proposed building sites so avoid the need for remediation of the pits. A site-specific geotechnical assessment will be required at the building consent stage for all lots to ensure compliance with relevant standards and to address site-specific conditions. The BLA's shown on the geotechnical site plan have been moved to be clear of the easements over the electricity lines.

The Buller District Plan does not require setbacks from local electricity lines, and Buller Electricity have provided their written approval for this development (refer **Appendix E**). Therefore, no setback has been provided on the geotechnical site plan.

d) *areas of wetland and vegetation;*

The ecological assessment attached as **Appendix F** confirms the site does not contain any wetland areas. The existing pond areas and adjoining vegetation are shown on the geotechnical site plan attached as **Appendix D.** The landscape assessment attached as **Appendix G** shows the existing vegetation on the site that will be retained as part of this proposed subdivision.

e) *all waterbodies and watercourses on the site, including identification of any waterways having an average width of 3 metres or greater;*

The geotechnical site plan attached as **Appendix D** has identified the waterbodies that are less than three metres in width and the waterbodies that are larger than three metres in width.

f) *existing electricity and telecommunication infrastructure;*

The Scheme Plan attached as **Appendix A** shows the existing electricity lines. The site does not contain any existing telecommunication infrastructure. No electricity or telecommunication infrastructure is to be provided as part of this subdivision.

g) *the location of overland flow paths and secondary flow paths;*

The civil report attached as **Appendix B** includes the flood mapping results of a 2D stormwater model. This shows the overland flow paths and secondary flow paths as a result of the proposed subdivision.

h) areas of proposed excavation and fill, together with the existing and proposed finished contours for cuts and fills greater than 1m³. This should include excavation and fill necessary for the formation of roads/access and any excavation and fill required to create building platforms on the lots;

Cuts and fills greater than 1m³ required for the formation of the road will be confirmed at time of designing the road. Design of the road will be submitted to Buller District Council and approved by Buller District Council prior to construction.

As previously explained, the (BLAs) outlined in the geotechnical report for subdivision are indicative only and subject to further detailed assessment. A site-specific geotechnical assessment will be required at the building consent stage for all lots to ensure compliance with relevant standards and to address site-specific conditions.

Details regarding the areas of proposed excavation and fill, including existing and proposed finished contours for cuts and fills exceeding 1m³, will be confirmed at the building consent stage. This includes any excavation and fill necessary for the formation of the accessways and building platforms on the lots. The extent of excavation or fill required for potential building platforms will depend on the size, location, and foundation requirements of the proposed structures, which will be determined at the building consent stage following detailed design and geotechnical investigations.

A comprehensive geotechnical assessment, undertaken by a suitably qualified professional (Geo-team), will be conducted for each lot at the building consent stage to ensure that all geotechnical considerations, including ground stability and suitability for construction, are appropriately addressed in accordance with the Buller District Council's requirements.

i) reconsideration of the status of proposed Lot 18 noting that Council consider proposed Lot 18 is not appropriate to vest as legal road as it is only servicing a limited number of lots and provides no through-road function for future connectivity/development, please amend the proposal accordingly.

It is acknowledged that Council has discretion about whether an access is to be vested as a Road in the Council. However, it is our view that Council should reconsider the vesting of Lot 18 with the Council for the following reasons.

The road will be designed and constructed to New Zealand Standard NZS4404:2010. Table 3.2 Road design standards require that where an access provides up to six dwelling units, then the access is a private right-of-way. Where the proposed access is to provide access to more than six dwelling units, then the access is considered to be a lane or a road. While NZS4404:2010 does not specify when an access should be vested in Council, Lot 18 is to provide access to 15 allotments which are expected to each contain a residential dwelling in the future. This will result in an estimated total of 156 vehicle movements per day along Lot 18. Therefore, the number of dwelling units Lot 18 is to provide access to, significantly exceeds the 6 dwelling units Table 3.2 requires for a private right of way. Given the number of allotments Lot 18 is to provide access to and the number vehicle movements resulting from the subdivision, the vesting of the road in Council is considered to be in clear compliance with Table 3.2.

NZS4404:2010 provides for roads that have cul-de-sacs at the end where connections to other roads are not practical or feasible. The only way for Lot 18 to not have a cul-de-sac is by the allotment to have a second intersection onto State Highway 6. This additional intersection would need to be approved by NZTA. NZTA generally want fewer vehicle crossings or intersections onto State Highways to ensure traffic flows along the State Highway are necessarily impacted by additional vehicle crossings or intersections. Therefore, the best alternative to provide access to the allotments is via a public road with a cul-de-sac. This then ensure the road still aligns with NZS4404:2010 requirements.

In terms of connectivity, many people prefer to live in cul-de-sacs as the traffic is generally slower, and generally only residents and the visitors to specific properties drive down the cul-de-sac. As there are fewer vehicle movements along the road, vehicles tend to move slower, making the road safer for pedestrians. The slower vehicles mean users of the road can view the pedestrians more easily.

Requiring Lot 18 to be a private right of way will likely result in the right of way not being appropriately maintained. Any part of the intersection that is within the legal road boundary of State Highway 6, will be maintained by NZTA. However, the remainder of the road will need to be maintained by the owners of Lots 1 to 15. Some of these owners may not have the financial ability or other means to provide their share of the costs for maintaining the right of way. There is also likely to be differing opinions about the quality of the formation the right of way should be maintained to, or the frequency maintenance is undertaken. There is a risk that one or two of the landowners refuse to participate in the ongoing maintenance of the road. If any of these things happen, then the right of way will not be maintained resulting in potholes forming and gravel being spread onto the State Highway. It could also result in civil disputes between the owners, resulting in the Council getting involved to work through the issues. If the maintenance is not undertaken, then the Council could undertake enforcement action on the owners. There is also a risk that if the right of way is not appropriately maintained, and it starts to have a negative impact on the

State Highway, then NZTA may need to speak to the Council about this issue. Overall if the right of way is not appropriately maintained, then the right of way could eventually be vested in Buller District Council to ensure it is maintained to a suitable standard.

If Lot 18 is vested in Buller District Council, then the Council can include maintenance of the road in their roading maintenance scheme. This will ensure the road is appropriately maintained. Lot 18 will provide access to 15 allotments; this is an additional 15 allotments the Council will receive rates from. Rates from these allotments can be used to cover the cost of maintaining the road.

For the reasons above, Lot 18 should be vested in Buller District Council as a road. Consent conditions are expected to reflect the road being vested in Council.

Planning – General

2. *The application needs to include the cancellation of an existing amalgamation condition imposed under RC05/85; however, this is not referred to in the application. Please amend/acknowledge accordingly.*

As the amalgamation condition relates to the underlying plan for this subdivision (DP 360520) it will cancel automatically under s227 RMA. No s241(3) certificate is required to facilitate the cancellation. A copy of the Territorial Authority certificate for DP 360520 is attached as **Appendix H** of response.

3. *The application includes the creation of proposed right of way 'R' under the subdivision over Lot 2 DP360520 which is not land that is detailed as forming part of the application. Provide details/ clarification on this.*

Section 3.1.2 of the application explains that easement R is required to provide access over Lot 2 DP 360520 to enable access to proposed Lot 17 and Lots 4 and 5 DP 360520. If easement R is not provided for, then the applicant will not have access to proposed Lot 17 of the subdivision. It was an omission that Lot 2 DP 360520 did not form part of the subdivision consent application. The owner of Lot 2 DP 360520 is a family member. Affected party approval is in the process of being obtained and will be provided once received.

4. *Page 18 of the application refers to a volunteered consent notice to be registered on the titles for each lot limiting residential development to one main dwelling and one minor dwelling. Provide wording for the volunteered consent notice (noting that there is no definition of a minor dwelling in the Buller District Plan).*

Here is the volunteered consent notice proposed to be registered on the new Record of Titles for Lots 1 to 15.

"*No more than one dwelling and one minor dwelling no greater than 65m^2 is permitted on this allotment*."

5. *Page 24 of the application states the proposed subdivision will not have reverse sensitivity effects on existing surrounding land but does not consider in detail the potential reverse sensitivity effects with respect to existing agricultural activities. Given that written approvals have not been provided from surrounding landowners, provide a more detailed assessment of potential reverse sensitivity effects and any measures to avoid, remedy or mitigate those effects.*

The proposed subdivision will not have reverse sensitivity effects on State Highway 6. The affected party approval from NZTA requires any building development within 80 metres of the State Highway is to be designed, constructed and maintained to achieve an indoor design noise level of 40dBL$_{Aeq(24hr)}$ inside all habitable spaces. These noise levels will enable residents to comfortably live within their homes without being disrupted by noise from the railway line or State Highway 69.

The recommendations within the landscape report have been accepted by the applicant and are anticipated to form conditions of consent as explained under point 7 below. New plantings along the road boundaries of Lots 1, 10, 11, and 14, and the retainment of the existing vegetation on Lots 14, 13, and 12 will ensure the new owners of the allotments will have little visibility of the State Highway and will not result in reverse sensitivity effects on the State Highway.

A volunteered consent notice is to be registered on the new Record of Titles for Lots 1 to 15 requiring that the new owners cannot complain about the existing activities and any future activities occurring on the following allotments:

- Lot 17 of the proposed subdivision (owned by the applicant John Raymond McLaughlin)
- Lot 2 DP 360520 (Record of Title 246192 - owned by Valerie Sandra McLaughlin, Kevin John McLaughlin, Gareth Richard Allen)
- Lot 1 DP 360520 (Record of Title 246191 - currently owned by Devils Eye Limited)
- Part Section 2 SO 14718 (Record of Title 1180936 - Landcorp Farming Limited)
- Section 43 Block II Waitakere SD and Section 38 Block II Waitakere SD (Record of Titles NL10A/1288 and NL10A/1289 - owned by Travor Ronald Thorpe)

The following wording is volunteer for the consent notice:
"*All owners and occupiers of the Lot and anyone giving effect to this consent acknowledges and accepts the site is located in and surrounded by rural zoned land and as such the site may be subject to adverse effects (including without limitation noise, vibration, dust, emissions, visual, landscape, vehicle movements or amenity effects) arising from the existing and future use of land located within the Rural Zone and surround the site. Such rural activities may be permitted by the District Plan, approved by resource consent, or may be established with existing use rights.*

All owners and occupiers of the site and anyone giving effect to RC250005 shall not seek to object to, hinder, or otherwise act in a manner to restrict commercial activities from occurring on adjacent land that is anticipated by any respective planning document."

This consent notice will ensure the new owners cannot complain about the existing and ongoing use of the aforementioned land by the current owners or any future landowners. This covenant will mitigate against any reverse sensitivity effects.

6. *The site will be accessed from State Highway 6. Provide evidence of/outcomes from any engagement with NZTA Waka Kotahi, including agreement on the proposed new access location and design.*

Appendix I contains the affected party approval from NZTA Waka Kotahi.

NZTA have requested four consent conditions to be complied with. NZTA are requiring the formation of the intersection onto State Highway 6 shall be formed to NZTA standard, the two farm gates onto the state highway to be closed and that correspondence from NZTA is obtained confirming the works within the state highway corridor have been constructed to NZTA standards. These three consent conditions are accepted by the applicant and are expected to be included in the final consent document.

The fourth condition requires a consent notice to be registered on the new Record of Titles requiring any dwelling or other noise sensitive activity within 80 metres of the state highway to be designed, constructed, and maintained to achieve an indoor noise level of 40dB$L_{aeq\ (24hr)}$ inside all habitable buildings. This condition is accepted by the applicant and is expected to be registered as a consent notice on the new Record of Titles for Lots 1, 10, 11, 12, 13, 14, and 15 as these are the only allotments that will have land within 80 metres of State Highway 6.

Landscape and visual effects

7. *The application acknowledges that as a result of the subdivision the landscape will change from rural to rural-residential in nature. Page 23 of the application details that "adverse effects resulting from the additional rural-residential allotments, will be more than minor, and will be mitigated by the requirements of the TTPP". Whilst part of this sentence may be a typographical error, it is unknown what aspects of the proposed Te Tai o Poutini Plan (TTPP), which is currently still being deliberated on, would mitigate the potential adverse landscape and visual effects of the proposal.*

Provide a landscape and visual assessment of the proposal, prepared by a suitably qualified and experienced person. The assessment should be guided by the "Te Tangi a te Manu – Aotearoa New Zealand Landscape Assessment Guidelines" and specifically include consideration of

setbacks and/or necessary restrictions for built development to avoid, remedy or mitigate the landscape and visual effects of built development on the proposed lots.

Please find attached as **Appendix G** a Landscape Report undertaken by Tom Carter at Tasman Carter Landscape Architects Limited.

The recommendations included in the landscape report are accepted by the applicant and are expected to become conditions of the consent. The requirement for a landscape management plan and the planting requirement for the additional planting is expected to be required prior to s224 certification. The requirements regarding fencing, maximum building heights, cladding of new buildings, exterior lighting of buildings and the maintenance of the existing vegetation and new plantings are expected to form consent notices on the new Records of Title for Lots 1 to 15.

On page 21 of report, the landscape architect states that building location areas for Lot 1, Lot 15 and Lot 13 should be setback 32 metres from State Highway 6. While this statement has not been included as a recommendation in the report, it is expected the following consent notice will be registered on the new Records Title for Lot 1, Lot 15, and Lot 14:

"That no building development occurs within 32 metres of the legal property boundary with State Highway 6."

The report identifies Landscape Building Location Areas (Landscape BLA's) on Lot 8, Lot 9, Lot 10, and Lot 11. The purpose of these areas is to ensure that buildings within Lots 8, 9, 10, and 11 are located in a way that responds appropriately to the character and sensitivity of the landscape. The following consent notice is expected to be registered on the Records of Title for Lots 8, 9, 10 and 11.

"For Lots 8, 9 10, and 11, any future building development is undertaken within the Landscape Building Location Area identified in the Landscape Report attached to the consent notice."

Ecological Effects

8. The application notes there is a combination of exotic and indigenous vegetation on the site, and this was confirmed during the site visit. There appears to be areas of regenerating indigenous vegetation present, and birds were observed in/around waterbodies, however it is unknown what ecological values exist on the site.

Provide an ecological effects assessment of the proposal, prepared by a suitably qualified and experienced person, who addresses the following matters (as a minimum):

a) the identification and delineation of any waterbodies and natural wetlands on the site (if any);

b) the ecological values and significance of vegetation and habitats on the site (with consideration of the relevant criteria under the Buller District Plan, West Coast Regional Policy Statement and proposed TTPP); and

c) consideration of any necessary restrictions for built development and land use to avoid, remedy or mitigate effects on ecological values.

Attached as **Appendix F** is the ecological assessment of the site. The Ecological Assessment concludes that no wetlands are on the site and no waterbodies, or the regenerating native forest are significant in terms of the National Policy Statement for Indigenous Biodiversity. The ecologist strongly urges the landowner to consider requiring that the main waterbody and the regenerating native forest that surrounds it, and extending east to the boundary with Lot 17 is covenanted to ensure the native cover is retained.

The landscape report (**Appendix G**) supports placing a covenant over the area identified by the ecologist to aid in addressing the landscape values of the site. The landscape report identifies this area as area "f."

On this basis the applicant agrees to placing a covenant over the area referred to as "f" in the landscape report. On this basis, the following consent conditions is expected to be included in the final consent document.

"*A private conservation covenant is to be placed over area "f" identified in the Landscape Report prior to s224 certification. The conservation covenant will require the landowners of Lot 3, Lot 4, Lot 5, Lot 6, Lot 7 and 8 to:*

- *Comply with the provisions of the Biosecurity Act 1993 and the Wild Animal Control Act 1977*
- *To not:*
    - *Fell, remove, burn or take any native trees, shrubs or plants of any kind, except for removal or trimming necessary to control encroachment on any fence or tracks on or adjacent to Area f.*
    - *Plant, sow or scatter any trees, shrubs or plants or the seed of any trees, shrubs or plants other than local native flora.*
    - *Introduce any substance injurious to plant life except in the control of pests.*
    - *Mark, paint, deface, blast, move or remove any rock or stone or disturb the ground.*
    - *Construct, erect or allow to be erected, any buildings within Area f.*
    - *Carry out any prospecting or exploration for, or mining or quarrying of any minerals, petroleum, or other substance or deposit.*
    - *Deposit any rubbish or other materials, except in the course of maintenance or approved construction, provided however that after the completion of such work all such materials shall be removed and the site left in a clean and tidy condition.*
    - *Allow any livestock on the land.*

- *The landowner may*
  - *Continue to use and maintain any existing access points*
  - *Form and maintain safe walking tracks no wider than one metre through the native vegetation.*
  - *Enhance existing indigenous vegetation by the planting and releasing of native species which are indigenous to the local area.*

All costs associated with the maintenance of Area f shall be the responsibility of the owners of Lot 3, Lot 4, Lot 5, Lot 6, Lot 7, and Lot 8"

Potentially Contaminated Site

9. *The application and the completed declaration form relating to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES-CS) details that the NES-CS does not apply to the activity. However, page 8 of the application refers to mining activities previously being undertaken on the site which falls under Category E "Mineral extraction, refining and reprocessing, storage and use" of the Hazardous Activities and Industries List (HAIL).*

   Provide an updated declaration and an assessment of the proposal, with supporting technical information as necessary, against the NES-CS.

Please find attached as **Appendix C** a Detailed Site Investigation of the site in terms of the NES-CS.

Roading

10. *Provide a Design and Access Statement, prepared by suitably experienced chartered professional engineer practising in civil engineering, in accordance with NZS4404:2010 for the proposed road/rights of way, including turning head, and vehicle crossings (including stormwater design and any culvert designs/assessment as required). A signed Schedule 1A Certificate must be submitted with the Design and Access Statement.*

As per the explanation under point 1(i) above, Lot 18 is to be vested as a road in Buller District Council. Design and construction of the road will be subject to an engineering approval process by Buller District Council.

11. *Provide an assessment to confirm whether new vehicle crossings/road intersections will comply with NZS4404:2010 in terms of sight distances and spacings.*

Section 3.3.2.2 of NZS4404:2010 requires any connector/collector and arterial roads to have a sight distance that complies with either Austroads or NZTA guidelines. State Highway 6 is a

connector/collector road under NZS4404:2010. Therefore, NZTA's guidelines are applicable to this intersection.

NZTA's Planning Policy Manual (2007) requires a sight distance of 282 metres in either direction for a road that has a speed limit of 100km/hr. The affected party approval from NZTA attached as **Appendix I** to this response confirms that the proposed intersection has a sight distance of 300m to the south and 290m to the north. As these sight distances comply with NZTA standards, the sight distances comply with NZS4404:2010.

Wastewater

12. *Provide an engineering report, prepared by a suitably experienced chartered professional engineer practising in civil engineering, confirming the suitability of the site for wastewater disposal to land, including any requirements for discharge permit/s (if applicable) from the West Coast Regional Council and recommendations for suitable system design(s).*

Appendix B of this response contains a civil report assessing wastewater and stormwater effects from the subdivision. Rule 79 of the West Coast Regional Land and Water Plan permits the discharge of sewerage effluent into or onto land where the discharge is not within 50 metres of any surface waterbody. As the site contains waterbodies, consent from West Coast Regional Council for the onsite discharge of sewerage effluent to land may be required at time of residential development occurring on the allotments. To ensure the new owners of Lots 1 to 15 are aware that consent may be required for the onsite discharge of sewerage effluent, the following consent notice is anticipated to be registered on the new Record of Titles for Lots 1 to 15.

"An onsite wastewater system must be designed and installed by a suitably qualified person experienced in on-site effluent disposal systems. The system and application field will need to be specifically designed for the site at time of building when the number of bedrooms and owners' preference are known.

The wastewater system must be situated and installed on the Lot so as to avoid any significant adverse effects on human health or the environment or a nuisance to neighbouring properties.

Advice Note:
The consent holder should consult with West Coast Regional Council as to their requirements in respect of the proposed wastewater system. All necessary consents and permits must be obtained prior to installation."

Stormwater

13. *Provide and engineering report, prepared by a suitably experienced chartered professional engineer practising in civil engineering, to demonstrate how stormwater from rural-residential use*

of the proposed lots will be managed to ensure that discharge from each lot will be maintained at pre-development levels. This information should include, but is not limited to:

a) stormwater catchment and design calculations for 10% AEP and 1% AEP rainfall events, using the HIRDS – NIWA RCP8.5 scenario for rainfall intensity;

b) supporting calculations using TP108 methodology for the catchment areas profiles, including pre-development versus post-development for the site for 100yr ARI and dispersion pipe calculations;

c) results of soakage tests on each allotment;

d) stormwater plans showing secondary flow paths/ overland flow paths with anticipated volumes;

e) tank details for stormwater attenuation within each lot;

f) hydrological assessment; and

g) easements and freeboard.

Attached as **Appendix B** is a civil report assessment the impacts of stormwater as a result of the proposed subdivision.

Water

14. There is a Council-managed stock water supply running through the site along the accessway to 8942 State Highway 6. There is no easement marked on the proposed scheme plan and Council requires an easement to be registered over this water main pipeline along the route.

Note: This water source is not intended for human consumption and any illegal connections to this supply will be considered a violation of the Council Water Supply Bylaw and the Water Services Act 2021.

The Scheme Plan attached as **Appendix A** of this response proposed easements AA, CA and EA being located over the existing stock water supply. An updated list of easements is attached as **Appendix J** identifies easements AA, CA, EA as being a right to convey water. Showing the easement as being a right to convey water is a standard easement purpose and means that it can be automatically generated when creating the easement document. If the easement was to be identified as being a right to convey stock water, then the easement document would need to be manually created, resulting in the process being more time-consuming. Having it as a right to convey water still enables the Council to manage it in accordance with any appropriate legislation and internal Council processes. It also enables special easement conditions to be added to the easement document.

In 2017 a Land Transfer Plan 513448, attached as **Appendix K**, was created to create an easement over the Council managed stock water supply that runs through Lot 3 DP 360520 and adjoining allotments Lot 1 DP 360620 and Lot 1 DP 423667. This indicates that the Council has

been aware of the need for an easement to be placed over the stock water supply since 2017. It is unknown why this process was not finalised, and the necessary easements registered in the relevant Record of Titles.

Putting easements over the section of the stock water supply through Lot 3 DP 360520 only partially legally protects and partially provides legal access to the stock water supply. Therefore, the Council only has the legal ability to undertake maintenance to this section of the stock water supply. Not to the entirety of the stock water supply. This could have detrimental environmental effects if the Council cannot maintain the stock water supply. If the Council wants to ensure legal access and legal protection to the entirety of the stock water supply, then the process that began in 2017 should be completed by the Council. This will include the Council having direct consultation with other relevant properties owners of the land that the stock water supply is located within. If the process in 2017 is completed then, the applicant and the other parties would be entitled to compensation.

By requiring the applicant to register the easement through the subdivision process, the entire cost is on the applicant. This is unfair given it is a Council managed stock water supply, and the Council began the process for registering an easement over it in 2017.

Therefore, while the applicant is open to creating an easement over the stock water supply through the subdivision site in favour of Buller District Council, it is suggested that the Council instead completes the easement process started in 2017.

Electricity supply and Telecommunication

15. *Provide additional details on the proposed electricity supply for the proposed lots, including the location of existing lines and proposed connection points into the site, reticulation within the site, and proposed easement locations (where these will be required).*

The site does not have an existing electricity connection. There are power lines through the site. Easements A, C to I, K to M, T, U, X and Y are to be registered on the relevant titles for the relevant allotments as per the Easement document attached as **Appendix J** to this response. These easements are in favour of Buller Electricity Limited and reflects existing easement document 6913042.2 currently registered on the underlying Record of Title.

16. *Provide confirmation of supply/capacity from the electricity provider that the site can be adequately serviced.*

Correspondence from Buller Electricity Limited dated 1 May 2025 is attached as **Appendix L** and confirms that the cost of installing electricity to Lots 1 to 15 will be $128,764.47.

17. *Confirm whether the electricity supply will be underground from the existing infrastructure and whether consent will be required under the electricity utility rules of the Operative Buller District Plan.*

The applicant is intending to sell the allotments without an electricity or telecommunication connection. Not installing electricity will enable the new owners to provide their own electricity at time of building development. This could be via traditional underground cables or by alternative sources such as solar panels.

Solar panels are becoming a more cost-effective means of providing electricity. Generally, there is more flexibility in the cost of installing solar panels than in traditional electricity connections. This is because the cost is dependent on the intended use of the electricity, including the size of the new dwelling. Not installing electricity to the allotments, provides the new owners with the ability to choose the option that is the most suitable for them, whether that is solar panels or installing a traditional electricity connection.

The following consent notice is anticipated to be registered on the new Record of Title's for Lots 1 to 15. This ensures each new owner understands an electricity connection has not been provided to the boundary of the allotment.

Proposed consent notice:
"*At the time of subdivision consent Lots 1 to 15 have not been provided with electricity connections to the boundary. The registered proprietor is responsible for providing electricity services to the allotment."*

18. *The application contains no details on the supply of telecommunications for the proposed lots. Please provide comment.*

Correspondence received from Chorus NZ and dated 17 April 2025 (**Appendix M)** advises that the cost of installing fibre to Lots 1 to 15 will be $154,804.78.

The cost of installing fibre is considered to be prohibitive and an alternative option will need to be provided at time of building development. As per the Broadband NZ website and shown in **Figure 1** below, a wireless telecommunication connection can be provided by both Farmside or Zelan.

Figure 2 confirm that another alternative option is a telecommunication connection that could be provided by Starlink.

Figures 1 and **Figure 2** below show that alternative telecommunication options for wireless or satellite are available, confirming future residential development can be provide with an

alternative telecommunication connection at time of building development. To ensure the new owners are aware of that a landline telecommunication service has not been provided to each allotment at time of subdivision, the following consent notice is to be registered on the new Record of Titles for Lots 1 to 15:

"At the time of subdivision consent, Lots 2 to 6 have not been provided with telecommunication connections to the boundary. The registered proprietor is responsible for providing telecommunication servicing to the allotment."

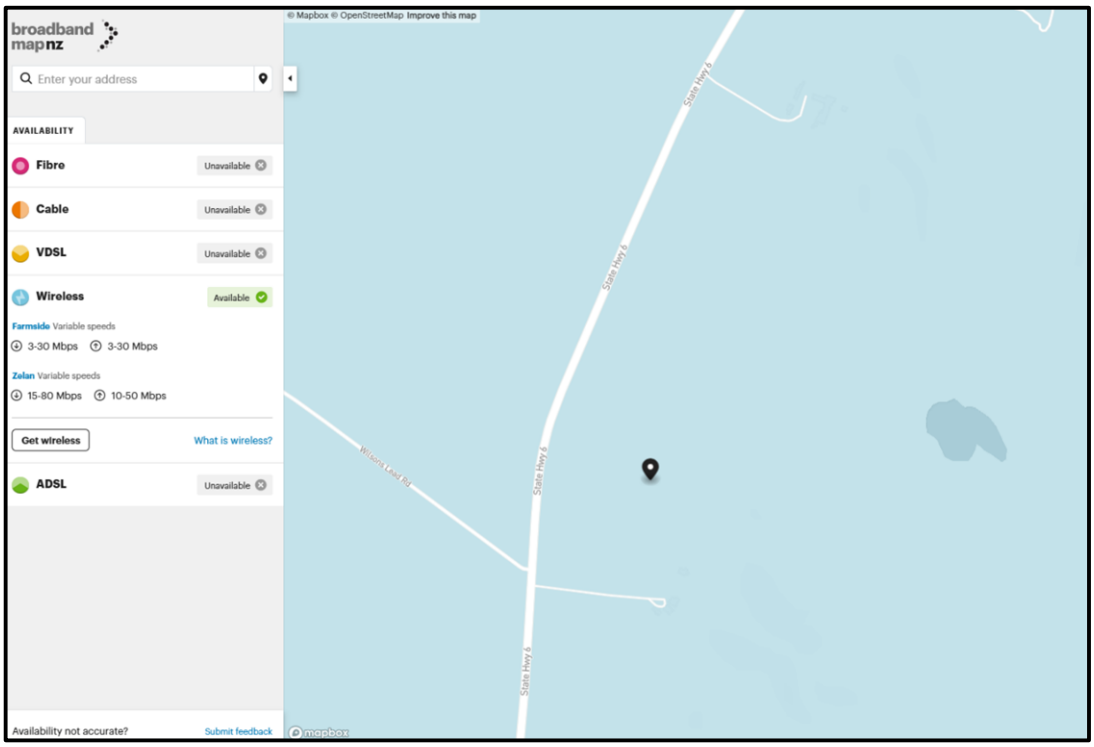


Figure 1: Broadband Map NZ: Source https://broadbandmap.nz Retrieved 10 June 2025.

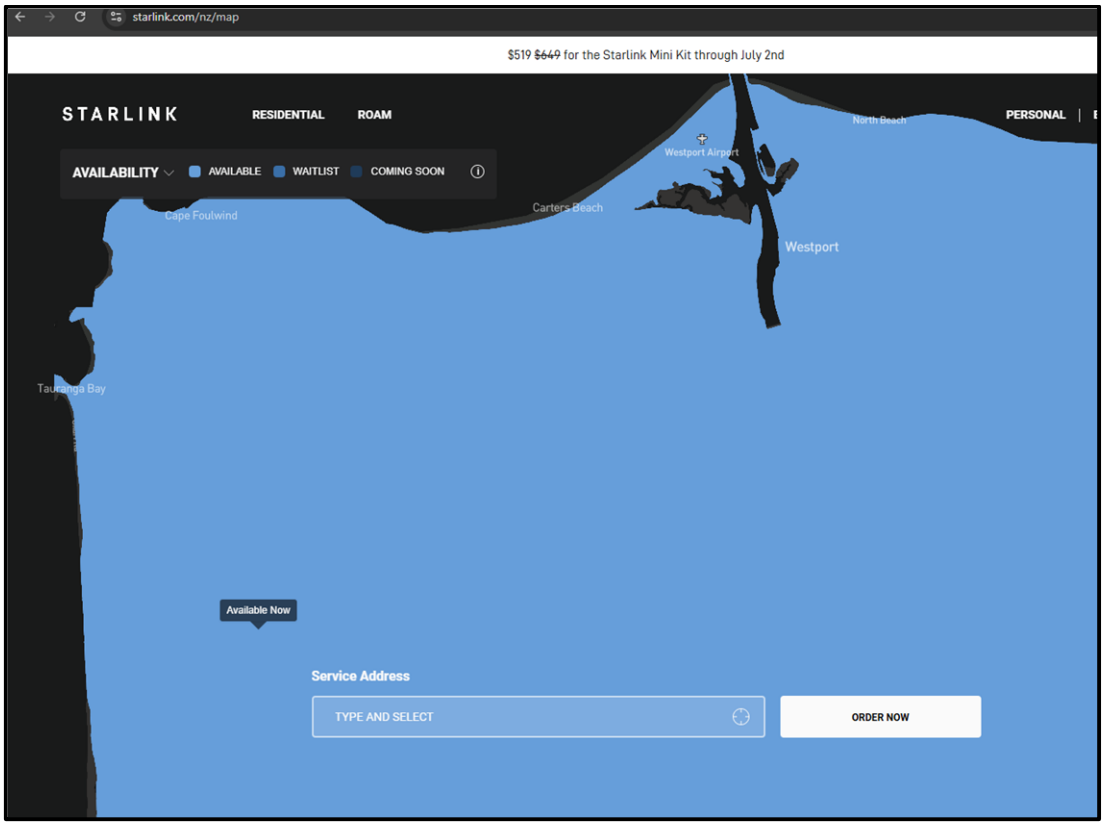


Figure 2: Starlink Satellite: Source https://www.starlink.com/nz/map. Retrieved 10 June 2025

Yours faithfully

DAVIS OGILVIE & PARTNERS LTD

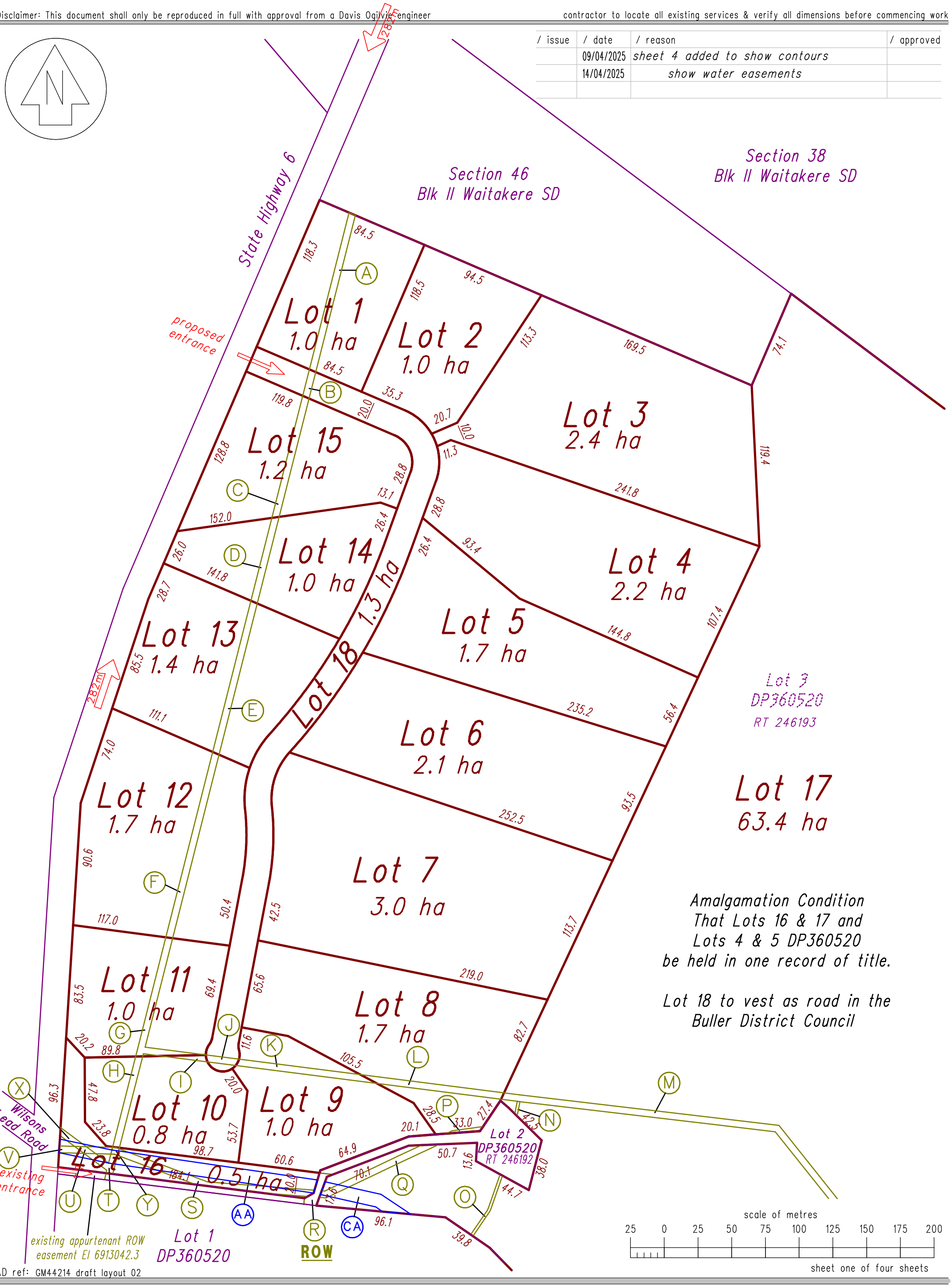
ALYCE HEINE

Senior Planner

Email: alyce@do.nz
Phone: 03 768 6299 Ext. 3

contractor to locate all existing services & verify all dimensions before commencing work

/ issue	/ date	/ reason	/ approved
	09/04/2025	sheet 4 added to show contours	
	14/04/2025	show water easements	



CAD ref: GM44214 draft layout 02

DAVIS OGILVIE
ENGINEERS / SURVEYORS / PLANNERS

Davis Ogilvie & Partners Ltd - Ph. 0800 999 333

Proposed Subdivision of Lot 3 DP360520 & easement over Lot 2 DP360520

/ drawn: Mike Robbins
/ scale@ A3: 1:2500
/ date: 01/25
/ file: GM44214
/ dwg: 101
/ issue: A

contractor to locate all existing services & verify all dimensions before commencing work

/ issue	/ date	/ reason	/ approved
	09/04/2025	sheet 4 added to show contours	
	14/04/2025	show water easements	

N

State Highway 6

Section 46
Blk II Waitakere SD

Section 38
Blk II Waitakere SD

proposed entrance

Lot 1
1.0 ha

Lot 2
1.0 ha

Lot 3
2.4 ha

Lot 15
1.2 ha

Lot 14
1.0 ha

Lot 13
1.4 ha

Lot 18
7.3 ha

Lot 4
2.2 ha

Lot 5
1.7 ha

Lot 6
2.1 ha

Lot 12
1.7 ha

Lot 7
3.0 ha

Lot 17
63.4 ha

Lot 11
1.0 ha

Lot 8
1.7 ha

Lot 10
0.8 ha

Lot 9
1.0 ha

Lot 16
0.5 ha

Lot 2
DP360520
RT 246193

Lot 1
DP360520

ROW

existing entrance

existing appurtenant ROW easement EI 6913042.3

Wilsons Road Road

282m

Amalgamation Condition
That Lots 16 & 17 and
Lots 4 & 5 DP360520
be held in one record of title.

Lot 18 to vest as road in the
Buller District Council

scale of metres
25 0 25 50 75 100 125 150 175 200

sheet two of four sheets

CAD ref: GM44214 draft layout 02

DAVIS OGILVIE
ENGINEERS / SURVEYORS / PLANNERS

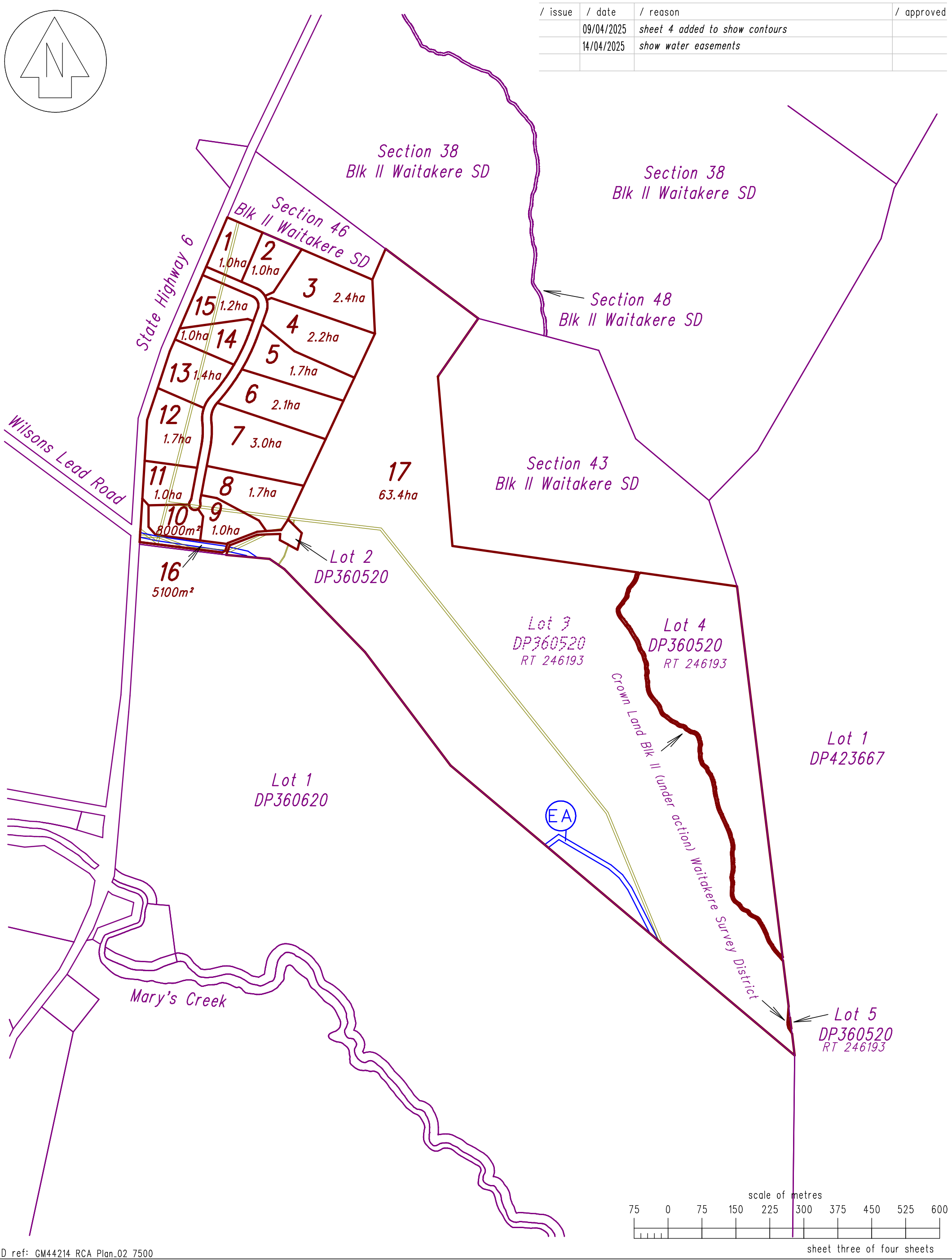
Davis Ogilvie & Partners Ltd - Ph. 0800 999 333

Proposed Subdivision of Lot 3 DP360520 & easement over Lot 2 DP360520

/ drawn: Mike Robbins
/ dwg: 101
/ scales A3: 1:2500
/ date: 01/25
/ file: GM44214
/ issue: A

contractor to locate all existing services & verify all dimensions before commencing work

/ issue	/ date	/ reason	/ approved
	09/04/2025	*sheet 4 added to show contours*	
	14/04/2025	*show water easements*	



CAD ref: GM44214 RCA Plan_02 7500

DAVIS OGILVIE
ENGINEERS / SURVEYORS / PLANNERS

Davis Ogilvie & Partners Ltd - Ph. 0800 999 333

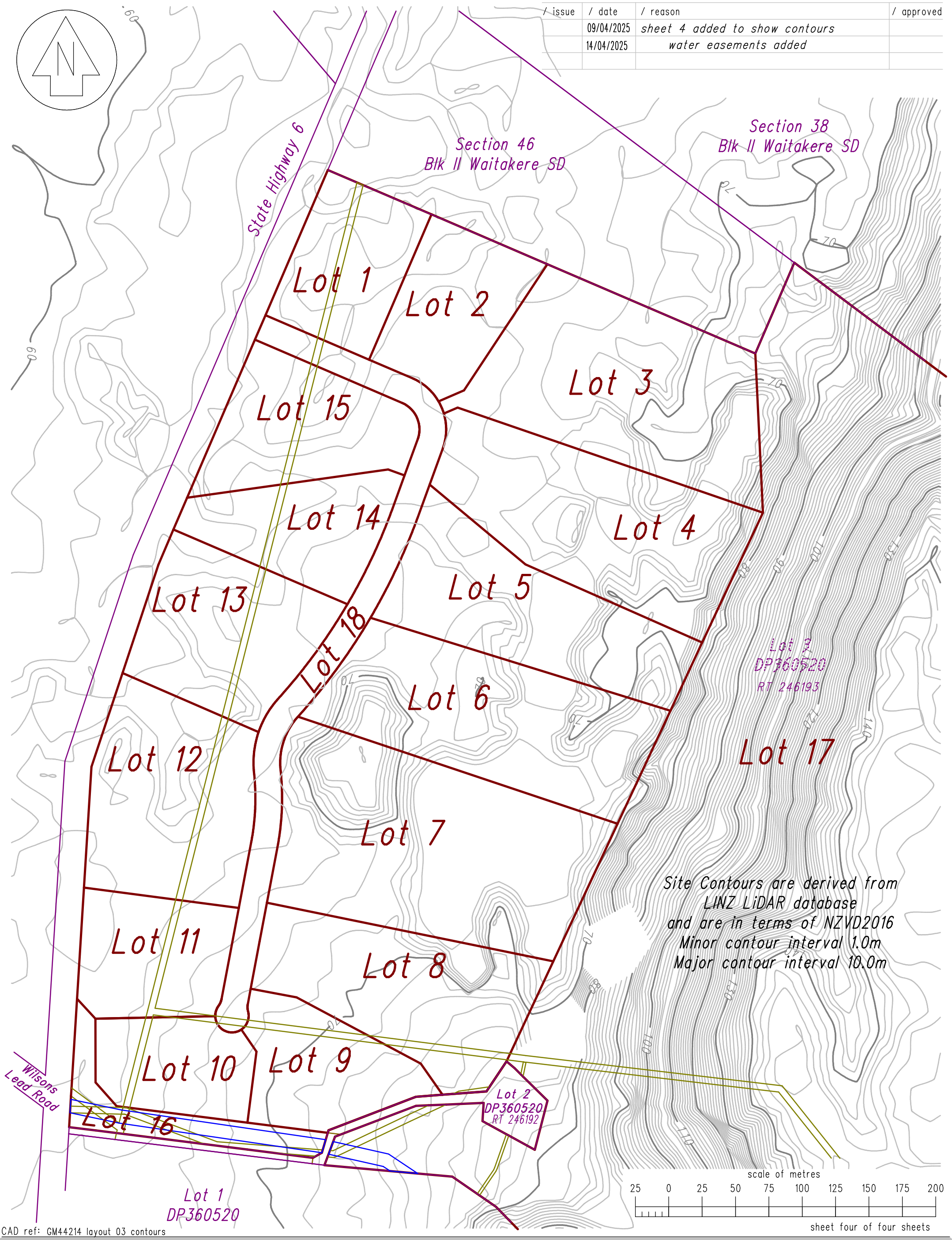
Proposed Subdivision of Lot 3 DP360520 & easement over Lot 2 DP360520

/ drawn	/ dwg
Mike Robbins	101
/ scale@ A3 / date / file	/ issue
1:7500 01/25 GM44214	A

Major contour interval 10.0m

contractor to locate all existing services & verify all dimensions before commencing work

/ issue	/ date	/ reason	/ approved
	09/04/2025	sheet 4 added to show contours	
	14/04/2025	water easements added	



CAD ref: GM44214 layout 03 contours

sheet four of four sheets

DAVIS OGILVIE
ENGINEERS / SURVEYORS / PLANNERS

Davis Ogilvie & Partners Ltd - Ph. 0800 999 333

Proposed Subdivision of Lot 3 DP360520 & easement over Lot 2 DP360520

/ drawn Mike Robbins

/ scale@ A3 1:2500

/ date 04/25

/ file GM44214

/ dwg 101

/ issue A

File No

[illegible] July [illegible]

[illegible]ohn Mclaughlin
[illegible] [illegible]eagrove Road
RD [illegible]
[illegible]

Email [illegible]mclaughlinjohn[illegible] hotmail[illegible]om

Dear [illegible]ohn[illegible]

[illegible]

Davi[illegible]Ogilvie ha[illegible]been engaged to complete the preliminary de[illegible]gn for an on[illegible]te wa[illegible]tewater disposal system, assess pre- and post-development stormwater flows, and determine the feasibility of attenuation required to manage any increase in site runoff. For a subdivision on State Highway [illegible]outh of We[illegible]port[illegible]egally de[illegible]cribed a[illegible]Lot [illegible] DP [illegible]the [illegible]ubdivi[illegible]on con[illegible]i[illegible]of [illegible] lot[illegible]and a new right of way[illegible]

[illegible]

Wa[illegible]tewater i[illegible]propo[illegible]ed to be di[illegible]po[illegible]ed of on[illegible]te to land[illegible]On[illegible]te dome[illegible]tic wa[illegible]tewater management standard NZS1547 has been used to estimate effluent disposal field type and size, ba[illegible]ed on demand and geology[illegible]

A[illegible]per the Davi[illegible]Ogilvie Geotechnical Report[illegible]the topography acro[illegible]the propo[illegible]ed lot[illegible]i[illegible]level or gently undulating[illegible]The [illegible]oil condition[illegible]acro[illegible]the [illegible]te are generally den[illegible]e[illegible]granular [illegible]oil[illegible]ranging from [illegible]m to [illegible] m deep[illegible]Thi[illegible]corre[illegible]pond[illegible]to [illegible]oil cla[illegible][illegible] Gravel[illegible]and [illegible]and[illegible]from A[illegible]NZ[illegible] [illegible]

Each dwelling i[illegible]a[illegible]umed to have [illegible] bedroom[illegible]According to Table [illegible]of A[illegible]NZ[illegible] [illegible]thi[illegible]equate[illegible] to a population equivalent of 6 – 7 people, resulting in a design flow of 1,000 – 1,400 L/day. To be conservative, the higher end of the design flow range—1,400 L/day—has been adopted. A tank capacity of [illegible] L i[illegible]al[illegible]o required[illegible]

Typical wa[illegible]tewater management [illegible]trategie[illegible]for a cla[illegible][illegible]oil include[illegible]Drip and [illegible]pray Irrigation[illegible]or the con[illegible]truction of a Mound[illegible]A[illegible]NZ[illegible] [illegible] Table M[illegible]how[illegible]that the de[illegible]gn irrigation rate [illegible]DIR[illegible]for both drip and [illegible]pray irrigation i[illegible] mm[illegible]day in gravel[illegible]and [illegible]and[illegible]A[illegible]NZ[illegible] Table N[illegible]how[illegible]that a mound ha[illegible]a DIR of [illegible] mm[illegible]day[illegible]

The design flow of 1,400 L/day (1.4 m³[illegible]day[illegible]can be divided by the DIR to return the area required for the proposed wastewater management system to adequately deal with design flow. This is calculated to be [illegible] m² for both drip and [illegible]pray irrigation[illegible]and [illegible] m² for the implementation of a mound. This shows that a mound would require a significantly smaller area than an irrigation [illegible]y[illegible]tem [illegible]however[illegible]due to the large amount of land available for each of the lot[illegible]an irrigation [illegible]y[illegible]tem would [illegible]till be fea[illegible]ble[illegible]

[illegible]ch[illegible]r[illegible]obdata[illegible]project[illegible] MCLAUGHLIN[illegible]ohn [illegible]ubd [illegible]HY [illegible] RT [illegible]Civil[illegible]PC[illegible]WMM Model[illegible]Letter[illegible]McLaughlin [illegible]ubdivi[illegible]on [illegible]Letter[illegible]ocx

A re□erve area□of □□□□ of the de□gn area i□propo□ed to allow for expan□on or re□ting of the land application □y□tem□Thi□area □hould be protected from any development that would prevent it from being u□ed it the future□Mound□□hould be located where the prevailing wind can pa□□over them. We note that there is more than sufficient area on lots to accommodate larger mound dimen□on□if required□

The drip irrigation □y□tem require□a top□oil depth of □□□ □ □□□ mm□a□per A□□NZ□ □□□□The Geotechnical Report confirms that this requirement is met at the test pit locations near each propo□ed dwelling□However□Lot□□□□□□□and □□ have a top□oil depth of only □□m□

In accordance with A□□NZ□ Appendix N□the water table □hall not be within □□ m of ground level if a mound i□to be u□ed□The Geotechnical Report □tate□that the ground water wa□found to be at depth□ranging from □□ □ □□ m below exi□ting ground level□Thi□i□deep enough that it meet□ this requirement and will not have any effect on the design of the system.

Drip and □pray irrigation □y□tem□□hould be de□gned a□per A□□NZ□ □□□□Appendix M□Mound□ □hould be de□gned a□per A□□NZ□ □□□□Appendix N□

□□ □□o□□ □ □□□□

A □D □tormwater model for the development wa□created in □une □□□□ u□ng the hydrologic and hydraulic modelling □oftware PC□WMM□t wa□u□ed to □mulate both a □□n□□□ and □□n□□□□□year rainfall event for both pre□and po□t□development□Rainfall data wa□□□burced from NIWA□High Inten□ty Rainfall De□gn □y□tem V□□□HIRD□V□□u□ng an RCP factor of □□ to the year □□□□A triangular hyetograph wa□created for □everal rainfall event□with a peak value of double the inten□ty□at □□□ of the rainfall duration□Con□equently□a □□hour rainfall event wa□critical for the □□n□□□□year event□and a □□hour critical for the □□n□□□□□year event□

The topography u□ed for the model i□LiDAR □burced from LINZ Data □ervice□Thi□cover□the development, its catchment and downstream properties where flooding has the potential to be increa□ed□

Soil conditions were identified as free-draining using information from Soils Map Viewer by Landcare Re□earch NZ Ltd□Due to the groundwater level ranging from □□ to □□ m below exi□ting ground level, infiltration rates for partially drained soil were applied. These are in line with Table □□□□ of the Chri□tchurch Waterway□□Wetland□□and Drainage Guide□

Within the model, all natural areas in the catchment are classified as grass or bush, while developed area□are repre□ented a□roof□or road□□Roughne□□value□for each □urface type were a□□gned ba□ed on typical literature value□□uch a□Chow□□□□□□

The □cheme plan for the development□ncluding the propo□ed building location□and right of way, is shown in the attached flood mapping attached to this letter. 400 m□per lot at □□□□ imperviou□ne□□ha□been applied to repre□ent building□and driveway□□Additionally□□□□□□ m□at □□□ imperviou□ne□□ha□been applied to repre□ent the right of way□

There are three exi□ting culvert□included in the model□all located along the down□tream boundary of the □te beneath □tate Highway □□The location of each culvert can al□o be □een attached to this letter. These culverts capture most of the runoff from the site and convey it to the neighbouring property. The increase in impervious area from the development is reflected by an increase in flow through these culverts. Shown below, Table 1 depicts the increase in flow through each of the culvert□□for each ARI□

Table 1: Increase in culvert flows (L/s) from new subdivision development

□□□□□□□□□□	□o□ □□□□□□□□□□□ □ □ □	□ □□□□ □□□□□□□□□□□ □ □ □	□o□□□ □□□□□□□□□ □ □ □
□□ □□ hour□	□	□□	□□
□□ □□ hour□	□	□□	□□

Table 1 shows that the subdivision will have minimal effect to the flows. The maximum increase in flow is 4.8 L/s through the middle culvert, for the 1-in-10-year event.

Due to the minimal effects that the subdivision has on discharge from the site, attenuation □torage i□not needed□Con□truction of □bak away□a□per the building code and con□truction of swales and infiltration for the right of way will sufficiently attenuate excess runoff from the site. Buildings should be constructed clear of obvious watercourses which are visible from the flood mapping attached□

□□ □o□□□□□□□

In conclu□on□provided the relevant NZ□ □tandard□and Building Code are followed□exce□□ stormwater runoff can be effectively attenuated, and wastewater can be suitably disposed of on □te□

If you have any que□tion□regarding the above□plea□e do not he□tate to contact the under□gned□

Your□faithfully□

□□□□□□□□□□□□□□□□□□□□

Prepared by□

□□□□ □□□□□o□

Graduate Civil Engineer □BE Civil □Hon□□MEngNZ

E□alex□ do□z

Reviewed by□

□□□□ □□□□□□□o□

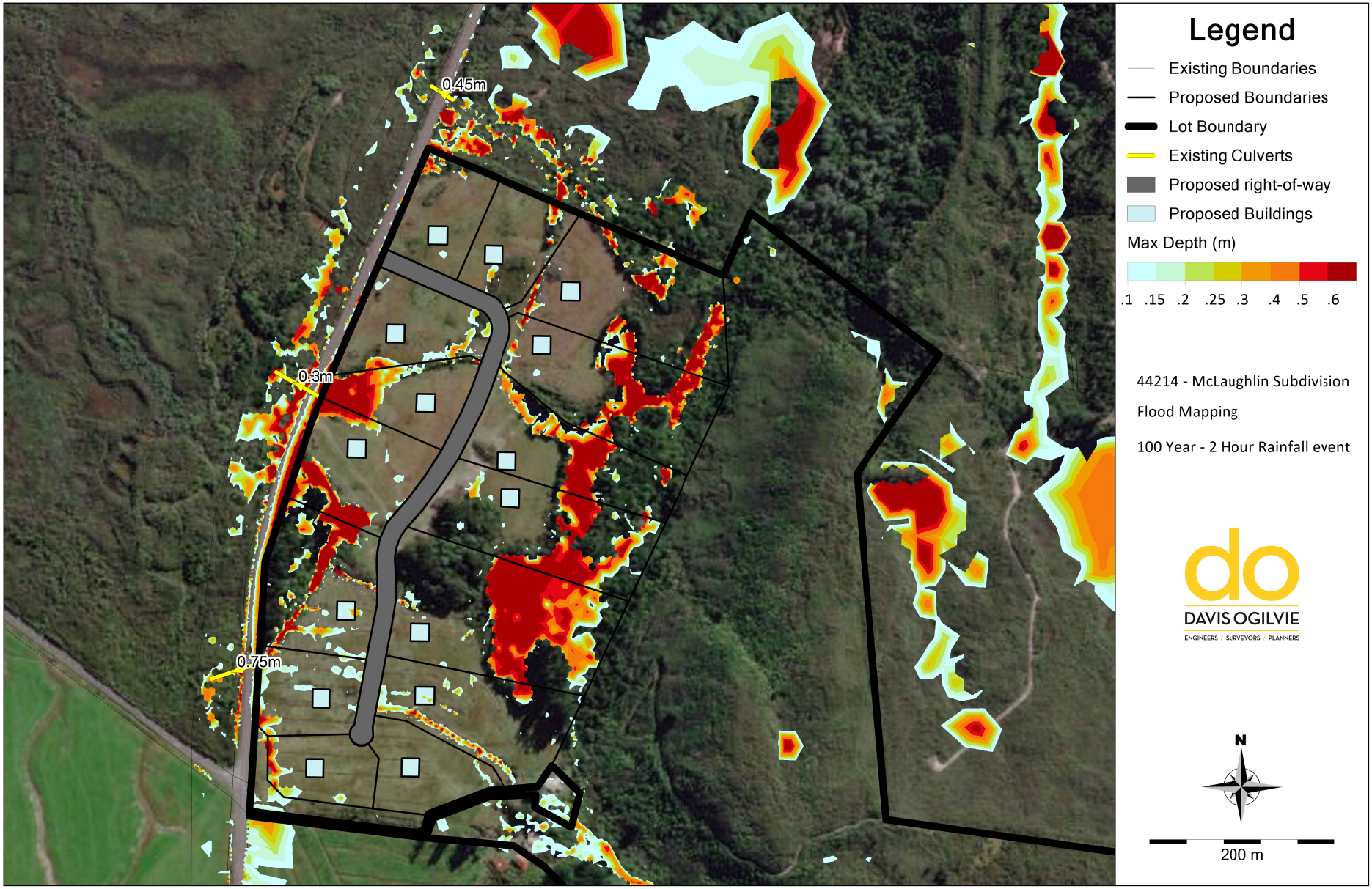
Principal Civil Engineer □BE Nat□Re□□Hon□□CPEng CMEngNZ

E□gary□ do□z

□□□□□□□□

□ Flood Mapping

□ch□r□obdata□project□□□□□□□□□ MCLAUGHLIN□□ohn □□ubd □□HY □RT □□□□□□Civil□PC□WMM Model□Letter□□□□□□□□l□□□□□McLaughlin □ubdivi□on □Letter□locx


0.45m
0.3m
0.75m
Legend
Existing Boundaries
Proposed Boundaries
Lot Boundary
Existing Culverts
Proposed right-of-way
Proposed Buildings
Max Depth (m)
.1 .15 .2 .25 .3 .4 .5 .6
44214 - McLaughlin Subdivision
Flood Mapping
100 Year - 2 Hour Rainfall event
DAVIS OGILVIE
ENGINEERS / SURVEYORS / PLANNERS
N
200 m

DAVIS OGILVIE

[illegible]

[illegible]

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Davis Ogilvie & Partners Ltd

Title:	Preliminary and Detailed Site Investigation: SHY 6 RT 246193
Client:	John Raymond McLaughlin
File Location:	\\Gmsvr\client files\44000's\44214 MCLAUGHLIN, John - Subd - SHY 6 RT 246193\Environmental\004 Report\250526.lw.csb.44214.DSI.FINAL.docx
Version:	1
Date:	27 May 2025
Project No.:	44214

Prepared By:	**Lizzie Wilkinson** Environmental Scientist MSc	**Signature:**
Reviewed By:	**Charlotte Stephen-Brownie** Senior Engineering Geologist MSc (Hons), BSc	**Signature:**
Approved By:	**Gareth Oddy** Technical Director - Environmental Scientist CEnvP-SC, BSc, MSc, IP402/405	**Signature:**

This report has been prepared on the specific instructions of John Raymond McLaughlin in connection with an environmental investigation at Lot 3 DP 360520. Only John Raymond McLaughlin and the Local and Regional Territorial Authorities are entitled to rely upon this report. Davis Ogilvie & Partners Limited (Davis Ogilvie) accepts no liability to anyone other than John Raymond McLaughlin in any way in relation to this report and the content of it and any direct or indirect effect this report may have. Davis Ogilvie does not consider anyone else relying on this report or that it will be used for any other purpose.

Davis Ogilvie did not complete an assessment of all possible conditions or circumstances that may exist at the site. Davis Ogilvie has provided an opinion based on information reviewed, site observations and investigations, and analysis methodologies current at the time of reporting. Variations in conditions may occur, and there may be conditions onsite which have not been revealed by the investigation, which have not been taken into account in the report. No warranty is included —either expressed or implied— that the actual conditions will conform to the assessments contained in this report. If any unexpected contamination is discovered during any soil disturbance works at the site, Davis Ogilvie should be notified to assess contamination conditions and possible management requirements.

Should anyone wish to discuss the content of this report with Davis Ogilvie & Partners Ltd, they are welcome to contact us on 0800 999 333 or at 64b High Street, Greymouth.

[illegible]

Davis Ogilvie & Partners Ltd. (Davis Ogilvie) has been engaged by John Raymond McLaughlin (the client) to undertake a combined Preliminary Site Investigation and Detailed Site Investigation (PSI / DSI) at Lot 3 DP 360520. Davis Ogilvie has investigated the area understood to contain a proposed subdivision in the west (henceforth "the site", **Figure 1**). This DSI was undertaken in accordance with Davis Ogilvie's letter of engagement dated 24 July 2024 and emailed variation dated 1 April 2025.

Davis Ogilvie understands a seventeen-lot subdivision is proposed at the site. A concept plan for the subdivision showing proposed lot boundaries (fifteen residential lots, associated roading and accessways and one large balance lot) provided by Davis Ogilvie is shown in **Figure 2** and provided in **Appendix A**. The aim of the investigation was to provide an assessment to establish whether current or former land use and / or activities has resulted soil contamination.

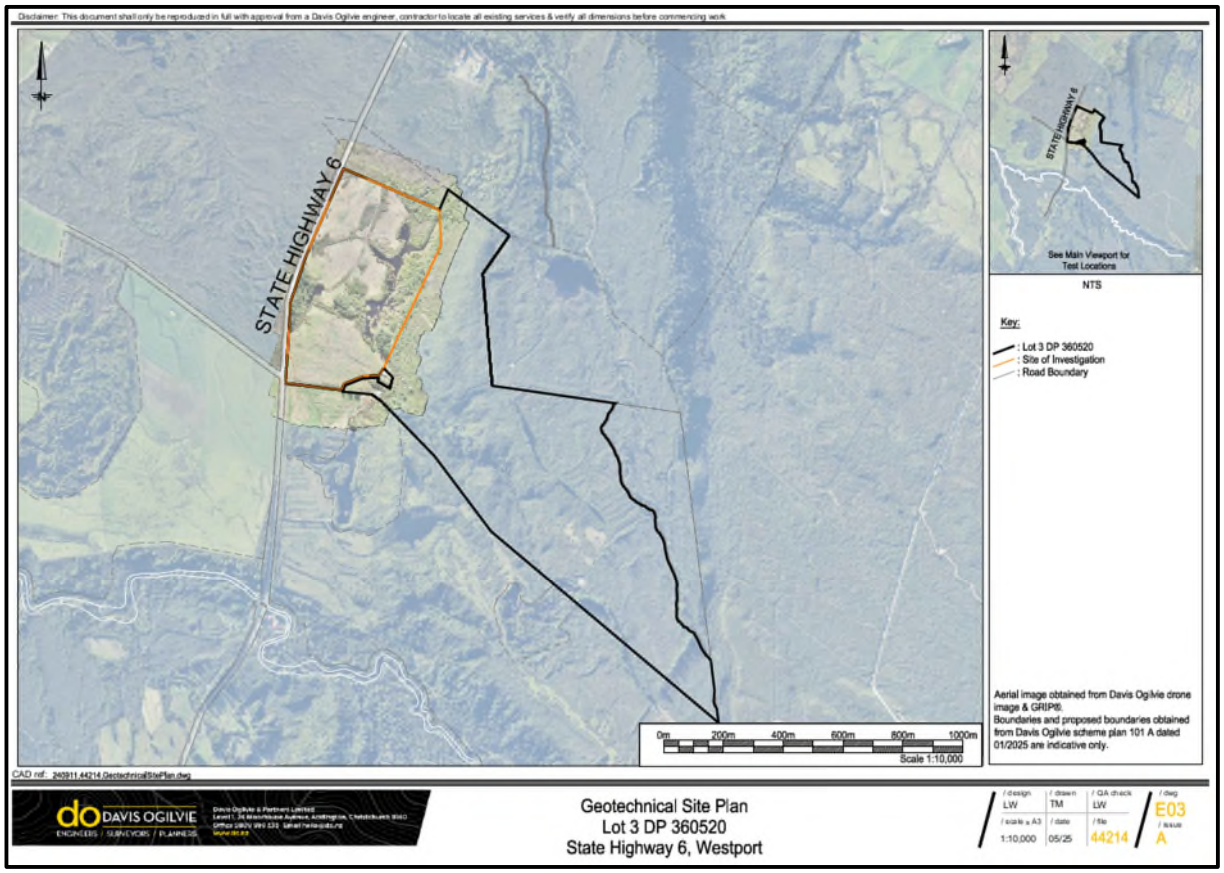

Figure 1: Current Lot Boundary and Davis Ogilvie Site Investigation Area.

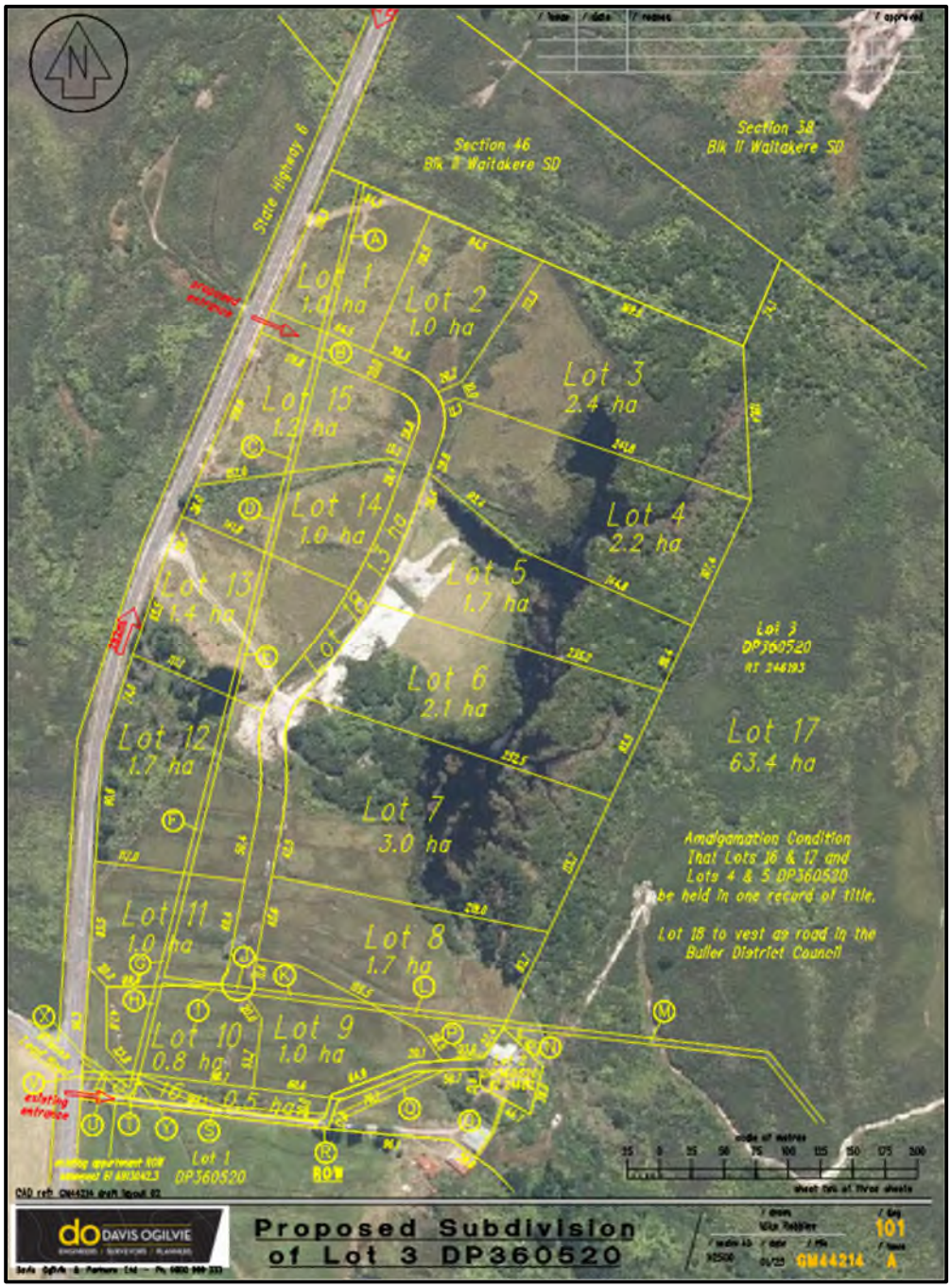

Figure 2: Excerpt from Davis Ogilvie Concept Plan indicating lot boundaries within the proposed subdivision (yellow). Source: Davis Ogilvie 44214 DWG 101A.

The Ministry for the Environment (MfE)'s 2011 Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCS[1]) applies to activities on sites that have, have had, or are more likely than not to have had an activity on the Hazardous Activities and Industries List (HAIL) carried out.

[1] Ministry for the Environment (MfE) (2012). Users' Guide. National Environmental Standard for Assessing and Managing Contaminants in Soils to Protect Human Health. Ministry for the Environment, Wellington, New Zealand.

While the West Coast Regional Council (WCRC)'s Selected Land Use Sites (SLUS) register does not hold information on the property (further information provided in Section 3.2), historical mining activity has been identified on the site, understood to be gold mining in black sand deposits at Addison's Flat in the 1800s – 1900s. Evidence of this onsite includes historical machinery, large ponds, and a tailings mound. Mining falls under HAIL Category E7 which includes mineral extraction and processing and the presence of waste or tailings.

Subdivision and the associated change of land use which are proposed of the site, are activities covered by the NESCS. A combined Preliminary and Detailed Site Investigation (DSI) with targeted soil sampling has been undertaken to assess the site. The objective is to establish whether historic gold extraction at the site has resulted in contaminants of concern in surface soils that are elevated or exceeding relevant human health soil contaminant standards, enabling evaluation of requirements around NESCS consent.

1.1 Objectives of the Assessment

The objectives of the PSI and DSI were as summarised below.

1.1.1 Preliminary Site Investigation

The primary objective of the PSI is to determine whether the site is a 'piece of land' subject to the NESCS. This requires reviewing past and current land use practices on site.

The PSI evaluates the following:

- Whether there has been (or is more likely than not to have been) a potentially contaminating land use.
- The nature and source of probable contaminants.
- The possible locations of contamination.
- Known or potential exposure pathways by which identified receptors could be exposed to the contaminants, under current or known proposed future land use.
- Known or potential human and ecological receptors that could be exposed to contaminants.

1.1.2 Detailed Site Investigation

The objective of the DSI assessment was to evaluate if contaminants of potential concern identified were present at the site and ultimately assess whether they pose an unacceptable risk to human health or environmental receptors at the site.

Additional objectives of this DSI included to evaluate regulatory compliance with the NESCS and other applicable regional plan rules.

1.2 Scope of Works

To achieve the above objectives, Davis Ogilvie completed the following scope of work under the supervision of a Suitably Qualified and Experienced Practitioner (SQEP):

- Desk study comprising review of the site history from publicly available historical aerial photographs, property file, West Coast Regional Council (WCRC) information, property file, and review of existing reporting on the site.
- Site walkover to identify potential visual soil contamination indicators.
- Collection of soil samples at targeted locations.
- Visual and olfactory assessment of soil samples to characterise soil type and assess for the potential presence of contaminants.
- Scheduling of soil samples for laboratory analysis for contaminants of potential concern associated with past land use and targeted HAIL.
- Laboratory analysis of selected samples for one of more of the following analysis:
  - Heavy metals,
  - Polycyclic Aromatic Hydrocarbons (PAHs).
- Assessment of the significance of soil contaminant concentrations in accordance with the NESCS and MfE Contaminated Land Management Guidelines No.2: Hierarchy and Application in New Zealand of Environmental Guideline Values.
- Completion of a conceptual site model and risk assessment for the proposed land use culminating in the production of this assessment report. This assessment and report have been supervised by a suitably qualified and experienced practitioner, as required by the NESCS.

The PSI and DSI were undertaken in general accordance with the process defined by Ministry for the Environment (MfE) Contaminated Land Management Guidelines No. 5: *Site Investigation and Analysis of Soils (revised 2021)*, and the findings are presented in accordance with MfE Contaminated Land Management Guideline No. 1: *Reporting on Contaminated Sites in New Zealand (revised 2021).*

2.1 Site Identification

Details of the properties included on the site are provided in **Table 1** below[2].

Table 1: Site Details

Item	Description
Address	State Highway 6, Westport
Legal Description	Lot 3 DP 360520
Title	246193
Property Owners	John Raymond McLaughlin
Site Area	250,000 m^2 / 25 ha (of wider 890,000 m^2 / 89 ha site)
Territorial Authority	Buller District Council

2.2 Site Description

A site walkover was completed by a Davis Ogilvie Environmental Scientist on 15 April 2025. Photographs taken during the site investigation are presented in **Appendix B**.

The site is located in the Buller District, West Coast, on the eastern side of State Highway 6 (SH6) approximately 8 km south of central Westport. The total area of Lot 3 DP 360520 is 89 ha, but this report concerns the proposed subdivision in the approximately 25 ha area (the site) beside SH6 and bounded by a terrace in the east. The southwestern corner of the site is adjacent to the intersection of SH6 and Wilsons Lead Road. The site is approximately 3.5 km southwest of the Buller River.

The site topography is generally flat with moderate undulating relief and a gentle lowering of relief westward with a mound of material located relatively central to the site. The mound is understood to be uncontrolled fill, is located near the centre of the site, covering approximately 1 ha and extending to a height of approximately 9 m above surrounding ground level. Several shallow man-made drainage features directing water away from the site in a westward direction are visible. A large surface water body is present along the eastern edge of the site, towards the toe of the adjacent terrace, cross-cutting proposed Lots 3 – 8.

[2] Information sourced from GRIP Online Cadastral Mapping, accessed June 2022.

Anecdotal information from the client, Mr J. McLaughlin, indicates that the lake is dominantly anthropogenic in origin (related to gravel washing / dredging), with steep cuts along the pond edges. The site is located at the toe of a terrace immediately east of the site. The terrace face is approximately 80 m high with steep vegetated slopes (approximately 46° slope angle) and the base of which corresponds approximately to the eastern site boundary. Water level in the ponds appears to range from approximately 0.5 – 4 m below existing ground level (m begl) compared to the rest of the site, depending on location. There were no obvious signs of contamination (e.g., vegetation stress, odours, waste items and / or debris).

2.3 Geology and Hydrogeology

The published geology[3] of the site is identified as primarily Middle Pleistocene Ocean beach deposits, described as *"[iron oxide] cemented marine sand and gravel (Q9b)."* East of the site the terrace geology is identified as Early Pleistocene River deposits, described as *"weathered and locally cemented river gravel and sand (eQa)."* A review of the GNS National Water Table Map[4] indicates groundwater level is between 0.0 – 2.5 m begl.

A bore search was conducted for the area. There are no registered bores within 500 m of the site according to West Coast Water Bores online map.

2.4 Groundwater and Surface Water Sensitivity

A review of the GNS National Water Table Map[5] indicates groundwater level is between 0.0 – 2.5 m below ground level. An assessment to establish whether the shallow groundwater aquifer below the site is a 'sensitive aquifer' as defined by the Ministry for Environment (MfE) Guidelines, (2011) has been undertaken (refer to **Table 2** below). It is noted that an aquifer is sensitive when either all of the first three criteria set out below are met or the fourth criterion is met in accordance with Module 5.2.3 of the MfE Guidelines.

[3] Nathan, S., Rattenbury, M.S., Suggate, R.P. (compilers) 2002. Geology of the Greymouth area. Institute of Geological & Nuclear Sciences1:250,000 geological map 12. Lower Hutt, New Zealand. GNS Science Limited.
[4] https://rogierwesterhoff.users.earthengine.app/view/nzwatertable
[5] https://rogierwesterhoff.users.earthengine.app/view/nzwatertable

Table 2: Groundwater and Surface Water Sensitivity	
Criteria	**Assessment**
The aquifer is not artesian or confined; and	**True**. According to *West Coast Groundwater Dynamics and Hydrochemical Evolution as Inferred from Regional Water Age and Chemistry Tracer Data* (2021) the site and surrounding area is within an alluvial unconfined aquifer.
The aquifer is expected to be less than 10 m below the potential suspected source of impact; and	**True**. Groundwater is expected to be at a depth of approximately 0.0 – 2.5 m below ground level.
The aquifer is of quality appropriate for use, can yield water at a useful rate and is in an area where abstraction and use of groundwater may be reasonably foreseen; or	Estimating current total volumes of available water within this zone is not currently possible[6].
The source is less than 100 m from a sensitive surface water body (i.e., a surface water body where limited dilution is available to mitigate the impact of contaminated groundwater discharging into the surface water body).	**True**. Surface water receptors have been identified within 100 m of the site.
Sensitivity Assessment	Based on the above, the shallow aquifer is considered to be sensitive.

Groundwater is considered to be sensitive in accordance with the MfE sensitive aquifer assessment. Further evaluation of the potential risk to groundwater quality is therefore included in this this assessment. Section 15 of the Resource Management Act prohibits the discharge of contaminants to groundwater unless specifically allowed for in a regional plan rule. Further assessment may be necessary to evaluate if a discharge of contaminants to groundwater is compliant with regional plan rules.

Several sources of information documenting conditions at the site were reviewed in order to evaluate whether and where activities and land uses with the potential to contaminate the land may have occurred. Information sources reviewed include existing environmental assessment reports lodged with WCRC and provided by the Selected Land Use Sites (SLUS) register, historical aerial photographs, and several online sources.

3.1 Certificate of Title

- Issue of Renewable Lease of farmland on 2 September 1953 to William Terrence McLaughlin of Westport for 130 acres (there or less) being Sections 39 and 40, Block II, Waitakere Survey District. Note ‘Fair Maid Dam’ to the east of Sections 40 and 39 (exert shown below in **Figure 3**). Full records are appended within **Appendix C**.

[6] Land, Air, Water Aotearoa (LAWA) (n.d.) West coast region. Accessed by: https://www.lawa.org.nz/explore-data/west-coast-region/water-quantity/groundwater-zones/west-coast-groundwater [Accessed on: 28/04/2025].

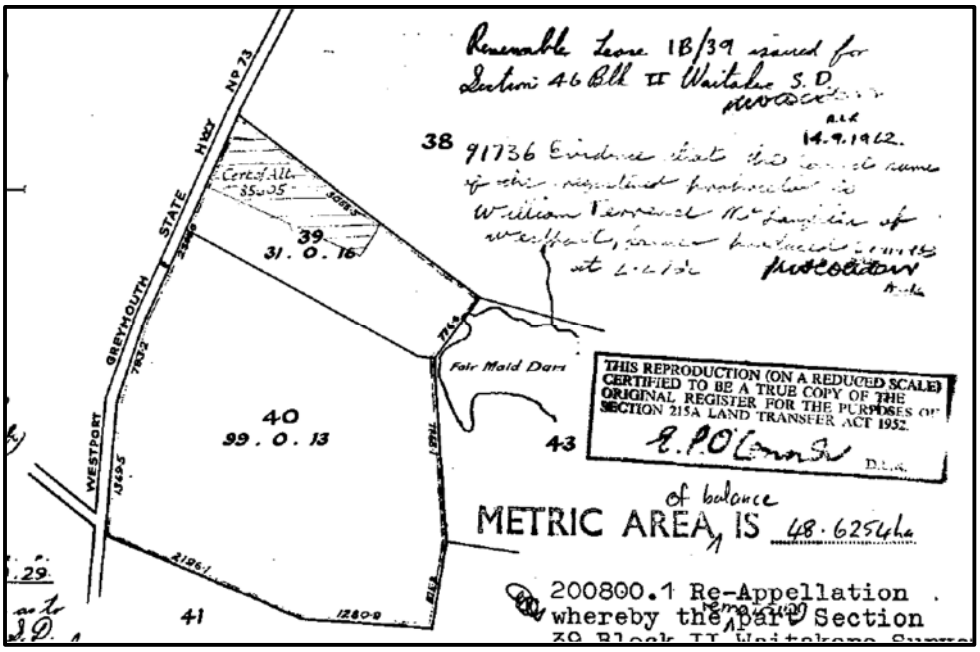

Figure 3: Excerpt from September 1953 CoT.

- Issue of Renewable Lease of farmland on 11 May 1966 to William Terrence McLaughlin of Westport, contractor and farmer, for 430 acres being Section 47 Block II Waitakere Survey District.
- Issue of a Certificate of Title under Land Transfer Act on 20 December 1979 to William Terrence McLaughlin of Westport, Contractor and Farmer for 174 hectares being Section 47 Block II Waitakere Survey District. Certificate details a notice for part of the within land being acquired for road and vesting (3,007 m^2) in 1984 (see Gazette Notice in **Figure 4** below) and exploration permits for 1995, 1998, and 2000.

Declaring Land to be Acquired for Road in Buller County

PURSUANT to section 20 of the Public Works Act 1981, the Minister of Works and Development declares that an agreement to that effect having been entered into, the land described in the Schedule hereto is hereby acquired for road and shall vest in the Crown on the 25th day of October 1984.

SCHEDULE

NELSON LAND DISTRICT

ALL that piece of land containing 3007 square metres, situated in Block II, Waitakere Survey District, being part Section 47; as shown marked 'A' on S.O. Plan 13321, lodged in the office of the Chief Surveyor at Nelson.

Dated at Wellington this 15th day of October 1984.

L. OZICH,
for Minister of Works and Development.

(P.W. 72/6/12/0; Ch. D.O. 40/72/6/12/90)

16/1

Figure 4: The New Zealand Gazette Notice 1984.

- Issue of a Certificate of Title under Land Transfer Act on 10 March 1980 to William Terrence McLaughlin of Westport, Contractor and Farmer for 48.6 hectares being sections 40 and 52 of Block II Waitakere Survey District. Certificate details exploration permits for 1994, 1997, 1998, and 2000. A transfer to Valerie Sandra McLauchlin, Kevin John McLauchlin, and Gareth Richard Allen occurred in November 2005.

3.2 WCRC (SLUS)

West Coast Regional Council (WCRC) maintains an electronic register (Selected Land Use Sites (SLUS)) of past and current land uses within the West Coast region. The SLUS documents sites that have or have had a hazardous activity or land use conducted according to the MfE Hazardous Activities and Industries List (HAIL). Sites that are recorded as currently or previously having had an activity on the HAIL trigger the requirement for a contaminated land investigation prior to development. The site does not have HAIL activities associated with it according to WCRC's SLUS.

The neighbouring property to the north (Section 38 Block II Waitakere SD) is identified as a HAIL site according to WCRC's SLUS. Details state that it is a verified HAIL site with risk not quantified due to the historic use of the site for a sawmill and the presence of a 4,500 L underground storage tank for diesel.

Please refer to **Appendix D** for the site SLUS property statement.

3.3 Property File

The Buller District Council (BDC) property file was received and reviewed on 5 May 2025 by an Environmental Scientist. Information identified as being relevant is listed below and contained with **Appendix E**.

- Resource consent RC05/85:
  - Subdivide CT NL121/122 into three separate titles.
- 5 December 1975 Permit application (number 101846):
  - New building (hay barn) on Addison Flat.

3.4 Existing Reporting

Relevant findings from the Davis Ogilvie geotechnical report for subdivision of the site are summarised below:

- Davis Ogilvie, January 2025, Geotechnical Report for Subdivision – Lot 3 DP 360520, SH6, Westport.
  - A shallow geotechnical investigation and site walkover was conducted on 3 and 4 September 2024 including 15 machine-excavated test pits to a maximum depth of 4.5 m bgl.

- The investigation found surficial soil conditions across the site generally consisted of topsoil and / or organic silt from the ground surface to depths of 0.1 – 0.8 m bgl and were generally underlain by dense granular soils, with some areas of softer more organic deposits. The Geotech report noted that the upper layers of soil towards the south have been flipped in order to promote drainage, accompanying the incised drainage channels.
- The report concludes that the site is considered to be suitable under Section 106 of the RMA for the proposed subdivision.

3.5 Historical Aerial Photography

Historic aerial photography from Retrolens[7] and Google Earth have been reviewed and are included in **Appendix F**. Observations from the aerial images are summarised below in **Table 3**.

Table 3: Historical Aerial Photographs

	Date	Description
Source: Retrolens	1967	The black and white image details areas easily identifiable as thick vegetation and / or water and grassed areas. Vegetation and / or water can be seen in the east of the site and reaching from the east to the western border of the site in a section across the approximate middle. The spread of vegetation and / or water appears to follow a natural distribution following creeks and onsite water bodies. Creeks identifiable include one flowing from close to the western boundary to the southeast within the southern quadrant of the site. A second water course can be seen within the northern quadrant of the site east to west with a slight northern arch relatively centrally. Relatively centrally there is a lighter area which is presumed to be a stockpiling of material with track to access it from the western border. A small area in the northeast is not detailed within the figure.
	1974	Vegetated and / or water bodies are still present. An area (approximately 8,500 m²) in the south of the site appears discoloured in relation to previous image and surrounds. Potentially attributable to haying. The area (assumed a stockpiling of gravel) relatively central to the site appears to have expanded north-eastwards with initial area revegetated and an additional access track is visible. A track with several switchbacks is visible in the southeast of the site leading to the upper terrace.
	1978	The stockpiled area in the centre of the site appears to be a mix of established vegetation and trees with some areas showing gravel / soils. The (approximately 8,500 m²) discoloured area in the south is no longer visible. Track with several switchbacks in the southeast of the site is further established with less vegetation.

[7] Retrolens (n.d.) Accessed at: https://retrolens.co.nz/ [Accessed on: 17/04/2025)

Source: Google Earth	Oct 2003	Several areas appear to contain planned vegetation acting as potential division of the site into smaller parcels. Vegetation is present in an inverted-T-shape in the north of the site bordering the western boundary and the pond in the east. No subsoils are visible and the middle area that was previously identified appears to be vegetated. There remains an established track from the western boundary to the centre of the site. A small pond is visible, approximately 50 m east of the western boundary and is approximately 1,500 m². Water is clearly present within the ponds in the east of the site. The southern third of the site shows evidence of hump-and-hollow application with the southern watercourse seemingly diverted within one of the hollows. A singular tree is present.
	Dec 2012	Some additional vegetation growth in the north of the site. Multiple areas appear to be a lighter colour in comparison to the surrounding areas. Central area previously revegetated shows signs of excavation. Area is approximately 700 m².
	Mar 2013	Areas in north previously identified as being slightly discoloured now appear brown in comparison to green vegetation in nearby surrounds. Excavation area in centre of site is approximately 2,050 m². Pond banks in east are more easily visible (assuming lower water levels). Hump and hollow areas in south appear to have had various levels of vegetation growth in the hollows. A wider channel / track appears to run north to south in south of the site within the hump and hollows. Track in east appears less identifiable on account of increase vegetation.
	Aug 2013	A portion of the excavated area in the centre of the site appears revegetated. Discoloured areas in the north no longer present. Evidence of vegetation clearance in northern quadrant with track running north to south from cleared area to cleared area in centre of site.
	Dec 2015	Stockpiled area in the centre of the site now covers approximately 5,550 m² following an assumed grass surface scrape. Unusual-shaped mound present near cleared area. Shooting range concrete arch present relatively central near cleared area. Vegetation growth in north is what would be assumed to be seasonally variable. Vegetation in humps of hump and hollows within the south of the site are no longer visible.
	Mar 2017	Area of vegetation in north no longer present with one area showing what is assumed to be subsurface soils. Vegetation growth within humps of hump and hollows within the south of the site.
	Apr 2019	Vegetation in north and humps of hump and hollows within the south of the site appears discoloured. Some vegetation growth within excavated area within the centre of the site.
	Aug 2020	Excavated area in the centre of the site appears revegetated. Some discolouring of vegetation in the north when compared to southern portion.
	Mar 2023	Discolouring of vegetation remains in northeast of site only. Unidentifiable white structure is present in centre of site, north of previously identified excavations.

3.6 Client Anecdotal Information

Mr McLaughlin was able to provide details pertaining to the site history via an email received and reviewed by an Environmental Scientist on 5 May 2025.

- An area extending north to south in the north of the site (Refer to **Figure 5**) that is densely vegetated is understood to be a drain dug over 30 years ago. This area is now being revegetated with it being wet during winter months.

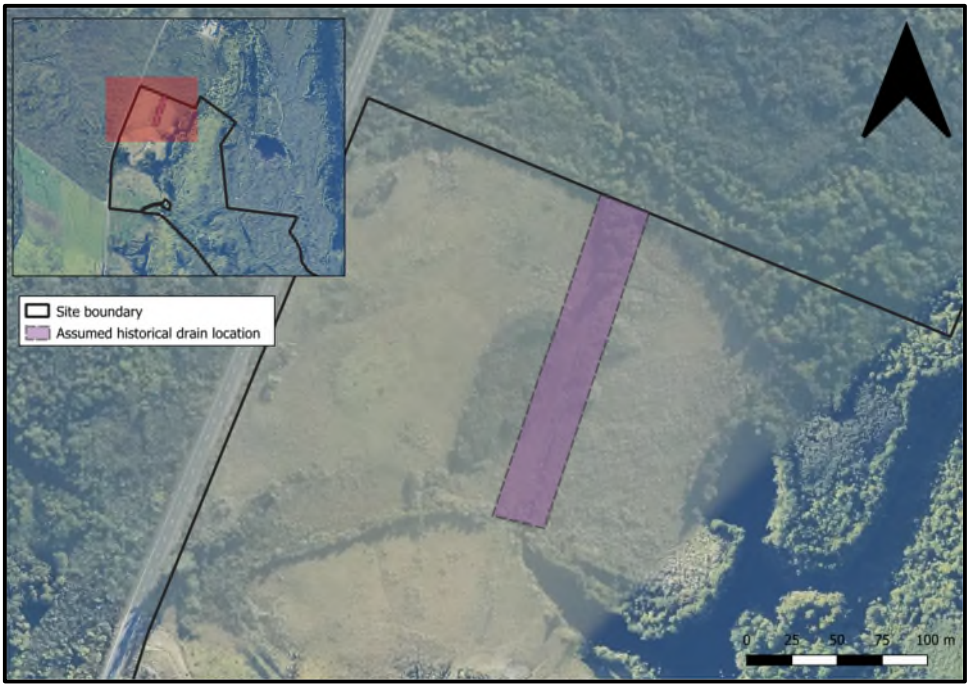

Figure 5: Approximate Location of Vegetated Drain.

- Mr McLaughlin clarified that a small accumulation of gravel and other material observed in the northern part of the site likely originated from recent excavator activity conducted approximately six months ago. This work was associated with preliminary feasibility assessments for potential residential development on the site.
- Regarding the presence of potential clinker or coal fragments identified during the April 2025 site visit, Mr McLaughlin informed Davis Ogilvie of a historical burning practice that occurred over 35 years ago. This process involved loading a lime kiln with coal, lime, and wood, with each burning cycle estimated to last between seven and ten days. The activity was associated with a fertiliser-related enterprise previously operating on the site.
- The mound, located relatively central to the site (proposed Lot 6 and Lot 7), is believed to be a remnant of historical activity linked to the Addison mines. Previous mineral drilling in this area did not identify the presence of coal.
- The concrete shooting range on the site is reported to be a privately established facility intended for clay bird shooting. Ammunition used are typically lead shots. The range involved the levelling of gravel and the installation of a concrete pad. It is reportedly used infrequently.

- With reference to 2015 aerial images and identified soil disturbance relatively central to the site, it is identified that material was sourced from a widening of Wilsons Lead Road to create passing lanes approximately 25 years ago and additional onsite redistribution of material was conducted to facilitate the creation of internal tracks.

3.7 Maps Past and National Cartographic Collection

Historical maps gathered from Maps Past and the National Cartographic Collection corroborate literature found online that the site is within an area historically known as 'Anderson's Flats'. See relevant information within **Appendix G**.

A waterbody can be identified within 1904 topographic map approximately within the boundaries of the site and in line with future waterbody plans.

In the 1925 topographic map, an area is coloured blue and labelled 'dam'. This corroborates with 'Fair Maid Dam' as mentioned on September 1953 CoT. South of the dam identified within this map is written 'Mining Res'. It is assumed this references where mining activities or resources are documented or believed to have existed[8].

Within the 1944 topographic map (see excerpt below) the site is labelled as being 'Abandoned gold workings covered with gorse'. Additionally, below the dam is a dashed line labelled as being 'Old Tailings'. Tailings are a byproduct of a gold mining process common in the late 1800s and early 1900s within New Zealand[9]. These are typically deposits of sand and silt and often found in large piles at the site of old mines.

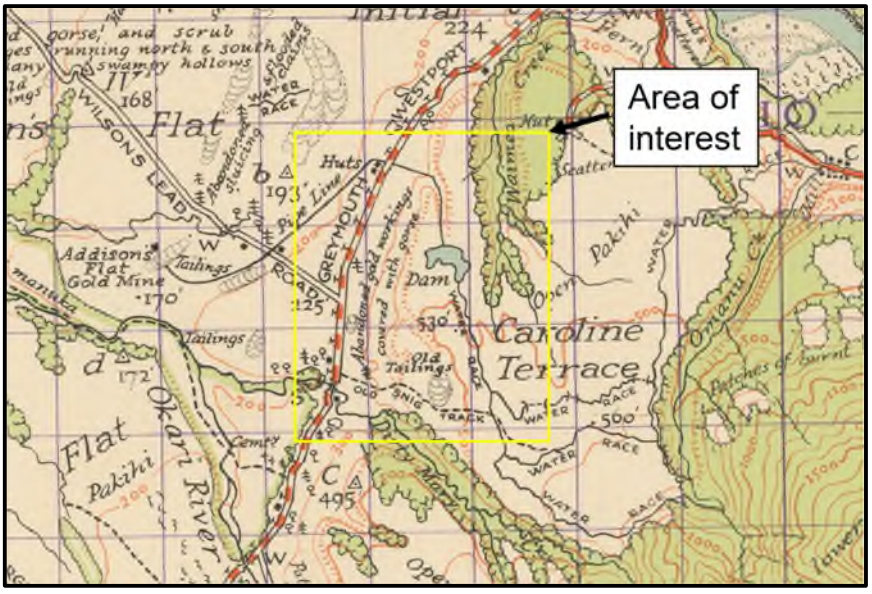

Figure 6: 1944 Topographic Map with Yellow Box Identifying Approximate Site Location.

[8] Cornish Mining World Heritage (n.d.) Accessed: https://www.cornishmining.org.uk/conservation/planning-within-a-whs/world-heritage-site-planning-toolkit/using-historic-and-modern-mapping-to-identify-attributes-of-outstanding-universal-value-0 [Accessed on: 29/04/2025].
[9] Government of Nova Scotia (n.d.) Accessed: https://novascotia.ca/nse/contaminatedsites/goldmines.asp [Accessed on: 29/04/2025].

The 1972 topographic map details several additional creeks across the site in addition to several more vegetative details.

3.8 Papers Past

Papers Past was assessed by an Environmental Scientist on 29 April 2025. Relevant excerpts can be found within **Appendix H**.

- Westport Times, Volume III, Issue 484, Page 3, 30 March 1869 states that a 10-acre block of land was granted a lease for gold mining purposes a quarter of a mile to the north of Dirty Mary's Creek.
- Westport Times, Volume V, Issue 762, Page 2, 12 January 1871 details the diversion of a waterway to be used to work a claim (assumed to be mined gold) with discharge then entering Dirty Mary's Creek.
- Westport Times, Volume X, Issue X, Page 4, 25 February 1876 potentially references the dam that is seen within the 1925 topographic map.
- Westport Times, Volume V, Issue 803, Page 2, 18 April 1871 includes details of gold fields by Dirty Mary's Creek.
- Westport Times, Volume XII, Issue 1572, Page 3, dated 19 March 1878, includes an application for lease of 50 acres of land on Dirty Mary's Creek under the Goldfields Act (1866). The Goldfields Act (1866) regulated gold mining licenses, claims and protection of the public from the effects of mining.

It is acknowledged that the precise locations referenced in these extracts cannot be definitively determined. However, the information they contain has been considered alongside multiple other sources to inform an understanding of the site's historical use. All excerpts from the *Westport Times* specifically reference mining activity, which was common in the region at the time[10].

[redacted]

A preliminary conceptual site model has been developed and consists of four primary components. For a contaminant to present a risk to human health or the environment, all four components are required to be present and connected. For the potential risk to be determined each component is required to be assessed. The four components of a conceptual site model are:

- Source of contamination.
- Pathway by which contamination can move from the source towards the receptors.
- Sensitive receptors which may be impacted by the contamination.
- Exposure pathway where contaminants potentially enter the receptor.

[10] Te Ara (n.d.) Story: West Coast region Accessed on: https://teara.govt.nz/en/west-coast-region/page-6 [Accessed on: 30/04/2025].

On the basis of the site history review and multiple site inspection (3 and 4 September 2024) and soil sampling (15 April 2025) the following HAIL activities were identified at the site:

- C2: Gun clubs or rifle ranges, including clay targets clubs that use lead munitions outdoors.
- E7: Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings.
- G3: Landfill Sites.
    - From identified mounding of material in centre of site creating two bunds and small disposal area within the north.

Locations are detailed in **Table 4** and **Figure 7** below.

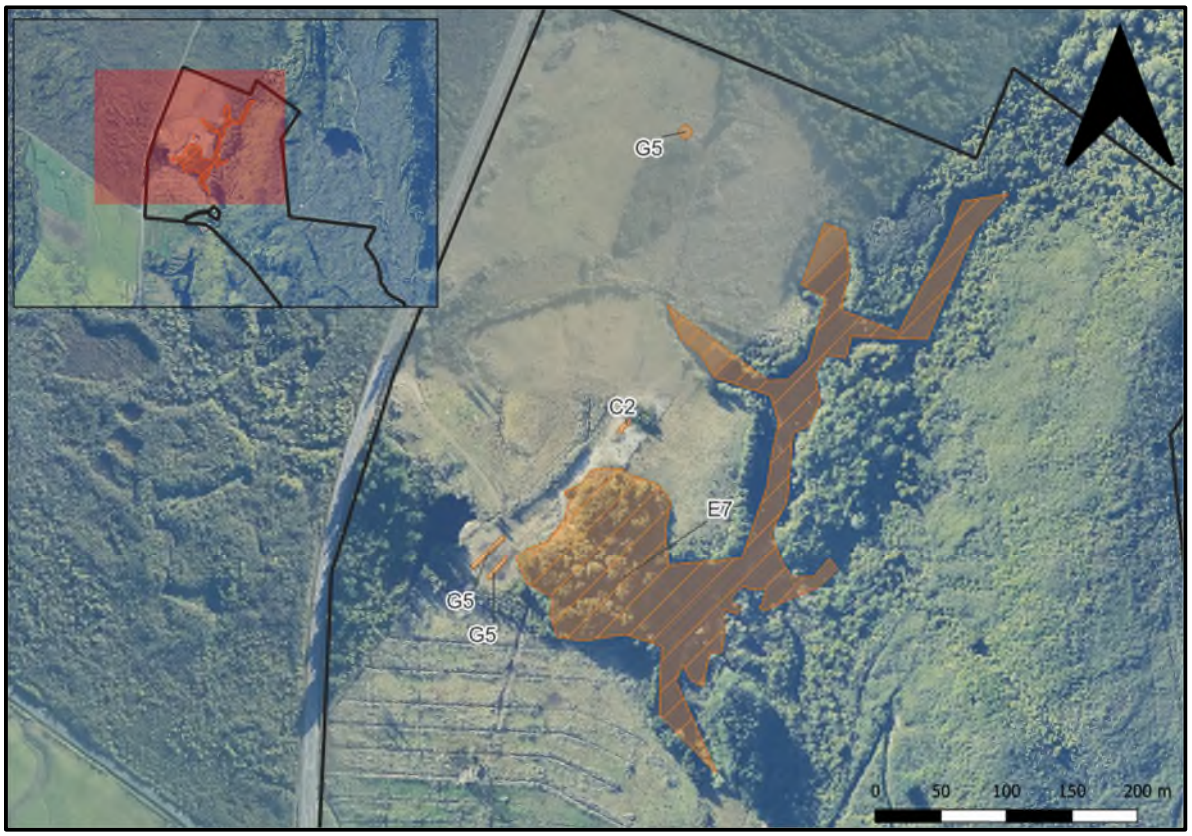

Figure 7: Identified HAIL on the site during April site visit.

Table 4: Preliminary Conceptual Site Model				
Potential Sources	**HAIL ID**	**Contaminants of Concern**	**Exposure Route and Pathways**	**Investigation location**
Shooting range ammunition – relatively central to site	C2: Gun clubs or rifle ranges, including clay targets clubs that use lead munitions outdoors	Heavy metals (lead, antimony, copper, zinc, tin, and nickel	Site Visitors, Future Site Staff, Site Inhabitants: • Inhalation of dust • Ingestion of soil • Ingestion of produce grown in contaminated soils • Dermal Transport by overland flow (rainwater or seasonal water flow) and / or advection / dispersion / dissolution Potential ecological receptors (including but not limited to: terrestrial vegetation, wildlife)	Locations were chosen to assess the likely source and distribution of bullet contamination.
Historic gold mining activities	E7: Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings.	Arsenic, mercury, cyanides, sulphides, and metals and hydrocarbons associated with fuel storage		Relatively central to site within vegetated mound
Unknown sourced material stockpiling or spreading on site	G3: Landfill Sites.	Dependent on material composition of but can include heavy metals, hydrocarbons, and organic acids		Vegetated mounds west of mound Small area (approx. 3m^2 in north)
Offsite timber treatment plant (Section 38 Block II Waitakere SD)	A18: Wood treatment or preservation including the commercial use of anti-sapstain chemicals during milling, or bulk storage of treated timber outside.	Pentachlorophenol (PCP), copper, arsenic, chromium, boron, PAHs, phenolics (creosote), anti-sapstian, organochlorine pesticides, fungicides, and tributyltin (TBT)		Plant is approximately 500 m north of site and is excluded from this investigation

4.1 Potential Contaminants of Concern

Potential contaminants of concern (CoCs) in soil related to the identified HAIL / potential HAIL activities include heavy metals (including mercury) and hydrocarbons (PAH).

During ore processing at gold mines, before cyanidation was introduced in the late 1800s, the most widely used method for extracting gold and silver from their ores was amalgamation with mercury[11]. As a result of mining activities, as the routine practice of disposing of large quantities of mine tailings, many parts of the world are now contaminated by metal-rich wastes in hazardous concentrations[12].

[11] Christie,T and Brathwaite, B. (n.d.) Mineral Commodity Report 8 — Mercury Factsheet. Institute of Geological and Nuclear Sciences Ltd.
[12] Macklin *et al.* (2006) A geomorphological approach to the management of rivers contaminated by metal mining. Geomorphology. Vol: 79. Issue: 3-4. Pages 423-447.

Lead is identified as a contaminant of concern with relation to the shooting range[13]. There are multiple potential sources of lead exposure associated with shooting firearms and using firing ranges[14]. For instance, most bullet projectiles are made from lead.

PAH have been identified as a CoC in relation to the historical mining practice of using and / or storing fuels (petrol or diesel) and lubricants (oil and grease). In addition to the potential for PAH production through the incomplete burning of organic materials.

4.2 Potentially Relevant Receptors

Given the future land use (rural – residential), potential receptors are considered to include earthworks contractors involved in undertaking future development and construction, and future residents on the site potentially growing produce for personal consumption.

In addition, given the sensitivity of the groundwater and potential stormwater discharges to ground, groundwater users neighbouring the site have been considered as a potential receptor.

4.3 Potential Contaminant Exposure Pathways

The potential receptors on site may contact the contaminants through dermal contact, ingestion and / or inhalation pathways.

[redacted]

The site investigation was carried out on 15 April 2025 and comprised a site walkover inspection, review of potential HAIL areas and the excavation and collection of soil samples. The investigation was limited to the proposed subdivision lots and development area.

5.1 Summary of Field Observations

During the site visit in March 2025, we made the following observations summarised below. Site photographs are contained in **Appendix B** and site map with annotations can be found in **Appendix A**.

- At the time of the site visit, the site is largely being used for grazing with sheep and goat present.
- Vast majority of site was vegetated with grasses and tussocks with various, more densely vegetated areas indicating seasonably saturated water channels.

[13] Health New Zealand Te Whatu Ora (n.d.) Minimising Lead Exposure in Shoot Club Ranges Factsheet.
[14] Murray, K., *et al.,* (1997) Distribution and mobility of lead in soils at an outdoor shooting range/ Journal of Soil Contamination. Vol: 6. Issue: 1. Pages 79-93.