

PRELIMINARY SERVICES REPORT

37211 / 2 AUCKLAND STREET, ASHLEY
/ ALASTAIR CAMERON

0800 999 333
hello@do.nz

Level 1, 24 Moorhouse Avenue, Addington
PO Box 589, Christchurch 8140
www.do.nz

Davis Ogilvie & Partners Ltd.

QUALITY ASSURANCE

Title: Preliminary Services Report

Client: Alastair Cameron


File Location: \\chsvr\jobdata\projects\37s\37211 - 2 Auckland Street,
Ashley\Civil\Design\Preliminary Services Report\240202.cm.37211.Prelim
Services Report.FINAL.docx

Version: 1


Date: 2 February 2024

Project No: 37211

Prepared By: **Clement Maloney**
Senior Civil Engineer
BE Civil, MEngNZ

Signature:


Reviewed By: **Gary Stevenson**
Principal Civil Engineer
BE Nat Res (Hons), CPEng,
CMEngNZ

Signature:


DISCLAIMER

This engineering report has been prepared at the specific instruction of Alastair Cameron. It outlines the design of the preliminary servicing for a proposed submission for the rezoning process under the district plan for 2 Auckland Street, Ashley.

Davis Ogilvie did not perform a complete assessment of all possible conditions or circumstances that may exist at the site. Conditions may exist which were undetectable given the limited investigation of the site and have not been taken into account in the report.

Davis Ogilvie's opinions are based upon information that existed at the time of the production of this document. Assessments made in this report are based on the conditions found onsite and published sources detailing the recommended investigation methodologies described. No warranty is included—either expressed or implied—that the actual conditions will conform to the assessments contained in this report.

Davis Ogilvie has provided an opinion based on observations, site investigations, and analysis methodologies current at the time of reporting. The report cannot be used by any third party without the written approval of Davis Ogilvie. The report cannot be used if there are changes in the referenced guidelines, analysis methodologies, laws or regulations.

Only Alastair Cameron and the Local and Regional Territorial Authorities are entitled to rely upon this engineering report. Davis Ogilvie & Partners Ltd accepts no liability to anyone else in any way in relation to this report and the content of it and any direct or indirect effect this engineering report may have. Davis Ogilvie & Partners Ltd does not contemplate anyone else relying on this report or that it will be used for any other purpose.

Should anyone wish to discuss the content of this report with Davis Ogilvie & Partners Ltd, they are welcome to contact us on (03) 366 1653 or at Level 1, 24 Moorhouse Avenue, Addington, Christchurch.

TABLE OF CONTENTS

1.0 PURPOSE OF REPORT 5

2.0 PROPOSAL DESCRIPTION 5

3.0 EXISTING INFRASTRUCTURE 7

4.0 EARTHWORKS..... 7

5.0 SEWER 8

6.0 STORMWATER 8

7.0 HIGH PRESSURE WATER..... 9

8.0 COMMON SERVICES TRENCHING 9

9.0 LIGHTING 10

10.0 ROADING..... 10

11.0 CONCLUSION..... 11

APPENDIX A – Sewer Capacity Email

APPENDIX B – Water Capacity Email

APPENDIX C – Service Confirmation

1.0 PURPOSE OF REPORT

The purpose of this report is to outline the preliminary engineering design concepts to support a request for rezoning from the proposed/existing Residential 3 (R3) and Large Lot Residential Zone (LLRZ) to Settlement Zone (SETZ) for 2 Auckland Street, Ashley.

This design report has been prepared to summarise:

- Proposed civil engineering design for the development at 2 Auckland Street, Ashley.
- Existing infrastructure around the site.
- Proposed conformance to national standards, Waimakariri District Council's (WDC) policies and best practices relating to subdivision development, in particular:
 - Waterways, Wetlands and Drainage Guide (WWDG).
 - WDC's Engineering Code of Practice (WDC ECOP).
 - Hurunui District Council's Development Engineering Standard (HDC DES).
 - NZS4404:2010 – Land Development and Subdivision Infrastructure.

2.0 PROPOSAL DESCRIPTION

The site, 2 Auckland Street, Ashley, is located within a rural area and is bounded by Canterbury Street to the north, Auckland Street to the west, Lower Sefton Road to the south and undeveloped land to the east. The total area of the site is 8.0 ha.

Based on a minimum lot size of 600 m², we have a potential yield of 93 lots if zoned SETZ. The site is currently zoned R3 and LLRZ, is rural in character and the land grades generally to the south. The site is legally known as Lot 1 DP 394101 (Title 376526).



Figure 1: Proposed Development Area

The development site is currently undeveloped rural land in character, with one dwelling and associated sheds located on-site. The house will be retained and incorporated into one of the new Lots.

3.0 EXISTING INFRASTRUCTURE

The only existing WDC infrastructure within the site is an assumed (given it collects SW from the Ashley Village) council stormwater drain located, within the lot, along the north-eastern boundary.

There is currently no WDC sewer reticulation within the Ashley township. Further discussion of sewer infrastructure is found in Section 5.0.

Another stormwater drain is located directly adjacent to the south-western edge of the proposed site. Further discussion of stormwater is found in Section 6.0.

Hurunui District Council water supply infrastructure is located within Canterbury and Auckland Streets. Further discussion of water supply is found in Section 7.0.

4.0 EARTHWORKS

The Listed Land Use Register (LLUR) maintained by ECan, documents sites that have had potentially hazardous land uses according to the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL). No HAIL activity within the site was documented in the LLUR statements.

To allow for the stormwater secondary flow network to function correctly, parts of the site will require cutting and/or filling.

In addition to the activities listed above, common services trenches, sewer and stormwater infrastructure will require excavation for installation. The trenches will be backfilled with site material and imported material where necessary. Minor lot regrading will need to be undertaken over the majority of the development.

All earthworks will be undertaken in accordance with the requirements of NZS 4431:2022 (Engineering fill construction for lightweight structures), WDC, Environment Canterbury and the proposed Construction Management Plan.

Final design, volumes and more detailed plans will be provided to Council during the engineering approval process. A detailed erosion and sediment control plan and report will be submitted for approval as part of these processes.

5.0 SEWER

The sanitary sewer network will be designed, in accordance with the WDC ECOP, to service all lots in the development.

The proposed sewer reticulation will consist of new gravity reticulation servicing the proposed residential lots, discharging to a new sewer pump station and rising main discharging to council reticulation located on Cones Road.

Confirmation has been given from WDC that the council reticulation located on Cones Road has capacity for the proposed development. See email response from Council in Appendix A.

All works will be designed and constructed in accordance with the WDC ECOP. Final details and design will be provided through the engineering approval process.

6.0 STORMWATER

Stormwater reticulation will be designed in accordance with the WDC ECOP, the Christchurch City Council Waterways, Wetlands and Drainage Guide (WWDG) and engineering best practice.

Stormwater runoff from lots and roads will be collected via a new gravity reticulation, including roadside sumps, for transport to the proposed stormwater management area which will consist of a standard two-pond first flush treatment and attenuation system which will include both discharge to ground and discharge to the existing drain located along the western boundary of the proposed site. This existing drain collects stormwater from other parts of Ashley Village and is assumed to be a WDC stormwater drain.

Indicative sizing and discharge modelling indicate that the proposed system will reduce both the post-developed discharge rate down to pre-developed levels while also reducing the overall discharge volume for the post-developed situation to less than the pre-developed levels for all storm events up to and including the 50-year ARI 48-hour rainfall event.

The typical two-pond treatment and attenuation system will reduce the expected contaminant loads within the stormwater to acceptable levels for all major contaminants except for total zinc and total copper, for the discharge to the drain, and E. coli for the discharge to ground.

Total zinc and total copper will be reduced by limiting the use of zinc and copper building materials within the proposed development, as a likely title notice, and E. coli will experience further treatment via filtration through subsoils, dilution and die-off. There is sufficient space within the property to include further treatment of stormwater if required.

A full treatment train assessment to confirm treatment requirements will be undertaken during the resource consenting process.

All works will be designed and constructed in accordance with the WDC ECOP and ECan requirements. Final details and design will be provided through the engineering approval process.

7.0 HIGH PRESSURE WATER

A high-pressure water main network will need to be constructed within the proposed development site to service the proposed residential lots. A new water supply main, including fire hydrants, will need to be installed by the developer with connections to the existing HDC reticulation located within Auckland Street and Canterbury Street.

HDC modelling is still to be undertaken, but discussions with Council indicate that water quantity is not an issue for supply; however, the need to upgrade reticulation, and the extent of this upgrade, will only be known once modelling has been completed. See email response from HDC in Appendix B.

Fire hydrant spacing will be in accordance with SNZ PAS 4509:2008 – New Zealand Fire Service – Fire Fighting Water Supplies Code of Practice.

Final detailed design will be in accordance with the HDC DES and SNZ PAS 4509:2008 – New Zealand Fire Service, Fire Fighting Water Supplies Code of Practice.

8.0 COMMON SERVICES TRENCHING

Services including water, power and telecommunications will be installed within a common services trench to be located generally within the berm area of the road reserve immediately adjacent to the lot boundaries. Specific locations will be provided following consultation with the service authorities and plans will be provided for approval to Council prior to installation.

Chorus telecommunications have confirmed that the network has adequate capacity and can be extended to service the proposed development. See confirmation email attached in Appendix C.

Mainpower have confirmed that the network has adequate capacity and can be extended/modified to service the proposed development. See Mainpower Capacity Letter dated 11 January 2024 attached in Appendix C. Power reticulation design for the development will be undertaken by an approved Mainpower designer.

All works carried out will meet the requirements of Council and the network operators.

9.0 LIGHTING

Lighting will be designed to provide a minimum of P3 luminance on the roads and pedestrian areas. The lighting will be designed in accordance with AS/NZS 1158.3.1 Road Lighting – Pedestrian Area (Category P) lighting. LED street lighting will be provided. The lighting design will be submitted to WDC for approval.

10.0 ROADING

The carriageway pavements will be designed using the *Design Graph for Flexible Pavements Chart*, Christchurch Metropolitan Area – Code of Practice for Urban Subdivision. The total compacted pavement depths will be based on the expected traffic loading and CBR values of the “in situ” material measured at the depth of the proposed subgrade.

Figure 2 below shows an indicative road cross-section for the proposed development.

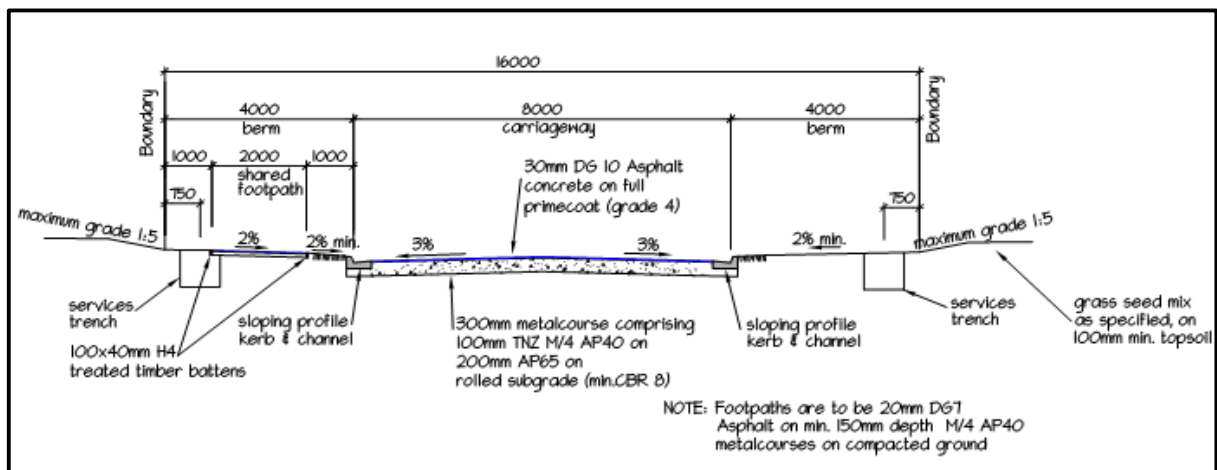


Figure 2: Indicative Road Cross Section

11.0 CONCLUSION

The proposed zone changes from Residential 3 (R3) and Large Lot Residential Zone (LLRZ) to Settlement Zone (SETZ) yielding up to 93 lots at 2 Auckland Street, Ashley can be suitably serviced in accordance with WDC requirements, NZS 4404 and engineering best practice.

Sewer servicing will consist of a new gravity sewer reticulation system connecting to a new sewer pump station that will discharge to the existing council reticulation on Cones Road. Existing council sewer reticulation located on Cones Road has capacity to service the proposed site.

The proposed stormwater management will utilise a new gravity reticulation transporting stormwater to a new stormwater management area for treatment and attenuation before discharge to both ground and the existing (assumed to be WDC's) drain along the proposed development's western boundary. Both flows and overall volumes leaving site will be reduced to, or below, pre-developed levels.

A high-pressure water main network will be constructed within the proposed development to service the proposed residential lots. Water volume can be supplied but the extent, if any, of the reticulation upgrades needed will be known once HDC modelling has been completed at a later date.

Power and telecommunications networks will be extended into the proposed development with layouts being determined during the engineering design phase and in consultation with the relevant service providers. Both the Mainpower network and Chorus telecommunications networks have sufficient capacity to service the proposed development.

The proposed development can be accommodated and constructed in accordance with the Waimakariri District Council's ECOP, HDC Development Engineering Standard, CCC WWDG, NZS4404:2010, NZS 4431:2022 *Engineered fill construction for lightweight structures*, and best engineering practice.

APPENDIX A

Sewer Capacity Email

Clement Maloney

From: Development Planning Mailbox <developmentplanning@wmk.govt.nz>
Sent: Thursday, 30 November 2023 3:38 pm
To: Peter Glasson
Subject: FW: [#DO37211] RESPONSE DRAFT: 37211: Rezoning of 2 Auckland Street, Ashley

Hi Peter

Thank you for your email.

Please find below in **red** responses from myself (Planning), our Project Delivery Unit (engineering) and the Council's Greenspace Team (Reserves).

Please note that this reply has come via our Development Planning email address. As we are anticipating a volume of rezoning specific emails over the next few months we are now co-ordinating these requests and our responses via a central point. Could I ask that any reply gets sent via direct return to that inbox?

Kind Regards

Matt

Development Planning Unit

Phone: [0800 965 468](tel:0800965468) (0800 WMK GOV)

Mobile: [+64 27 559 2987](tel:+64275592987)

DDI: [+64 3 266 9242](tel:+6432669242)

Hi Matt

2 AUCKLAND STREET, ASHLEY: PROPOSED REZONING OF PROPERTY TO SETTLEMENT ZONE (SETZ)

Thank you very much for your email response Matt. I think your proposal for a list of questions prior to meeting is efficient. The submission of Alistair Cameron seeks the rezoning of the 8.0 hectare site from RLZ under the Proposed District Plan to SETZ. Almost all of the existing sites in the Ashley village are already developed with a dwelling. The Cameron property directly abuts the existing township on the eastern side of the township.

With respect to services, it is proposed that potable water will be supplied by the Hurunui District Council and sewage will be reticulated and managed by WDC. Stormwater will be managed with an on site stormwater retention basin with the overall approach being that the post development peak discharge rate from the site will be no greater than the pre development peak discharge rate i.e. hydraulic neutrality. On the basis of that overall engineering approach, it is anticipated that the overall maximum lot yield will be approximately 90 lots. However, it is possible that the actual design of the final subdivision under a SETZ zoning will be less.

We have the following questions:

PLANNING

1. Does the Council have a preference – at this site - for providing reserve land on the property, or would it rather have 'cash in lieu'? **See below.**
2. Is there any planning requirement for a minimum number of lots under the SETZ on this site? **Council is not aware of any specific requirements.**
3. We are planning on submitting all of our evidence/ reports in support of the rezoning to the Council on 12 February 2024. Will this be sufficient time in order for the staff/ consultants who are preparing the s42A reports to provide feedback prior and for us to include any additional information that would be identified?

In short; this timeframe is very tight. We are anticipating that we will have a volume of rezoning related material submitted to Council between now and the 27th of February when submitter evidence is due. Following this, the team will be busy completing s42A reports for the totality of rezonings, and potentially undertaking joint conferencing on evidence as time allows or the Hearings Panel dictate. Following the completion of the s42A reports, officers will then likely be needing to respond to written questions from the hearings panel who have been issuing questions for response in advance of the hearings.

As a result of the above, and given the bounds of the hearing process, Council officers are not likely to be in the position of definitively providing feedback prior to evidence being submitted, although we appreciate that the panel have directed this to occur where possible. Officers will do their best to provide feedback within a reasonable space of time, however it would be safe to assume that this feedback will be very high level and generally Council will be relying on submitters to ensure that they have provided what they consider is appropriate evidence to the panel in support of their desired rezoning outcomes.

4. It is intended that the following subjects will be covered in evidence/ reports to be submitted to the Council on 12 February 2024:

5. Planning

- a. Planning
- b. Landscape Design & Effects
- c. Demand & Growth
- d. Soils. **Noted with respect to these**
- e. Reserves: WDC had previously approached Alistair Cameron regarding buying some land for a recreation reserve for Ashley as it appears that the Ashley Village is short of reserve area. As an example of a similar approach that Mr Cameron has in mind, the reserve area at 65 Acacia Avenue, Rangiora, has a similar type of design.

Our reserves team advise that "there is currently no definitive answer, but the intent of district planning (growth zones, etc) and our Greenspace levels of service suggest that any additional greenspace associated with new residential development at the Ashley settlement would be 'green linkage' type connectivity to provide off-road community connectivity and 'green' amenity.

- *Being a Residential 3 zone settlement [settlement zone], the existing residential growth potential of Ashley does not justify provision of an additional neighbourhood park or sports park.*
- *Our current WDC Parks Levels of Service trigger a neighbourhood park for every 1000 residents in urban/residential areas. The smallest viable park to meet this requirement is our specified 0.3ha. We have no 'trigger figure' between zero and 1,000, so we consider factors such as the above (growth potential).*
- *We have an existing small and historically undersized neighbourhood park in Ashley (0.1ha). It is currently being redeveloped and upgraded to improve its facilities and amenity.*
- *Given the above, I assume we would collect DCs for wider community/district reserves provision."*

At the Auckland Stret site, it is intended that a stormwater retention basin will be provided on the site in the south western corner. The overall approach is that the post development stormwater discharge will be the same as the pre development stormwater discharge. In addition to this SW retention basin area, the owner would like to provide a recreation reserve area next to the stormwater retention basin as part of the reserves contribution. Could you please provide comment as to the WDC's approach to the provision of reserves in the Ashley village generally; and, specifically with respect to the development of this property. **As above**

- f. Could you please advise if there are other subjects that should be covered in reports/ evidence within the "Planning" subject area. **None specifically come to mind; excepting consideration of relevant NESs including the NESCS. It is likely that other relevant hazards will need to be considered.**
- g. Could you please advise whether the Council has a minimum lot yield per hectare requirement that we should be designing to. This especially effects the engineering approach with respect to stormwater management on the site. **No in terms of a planning minimum yield.**

6. Engineering

- a. Potable Water Supply
- b. Sewer & Sewerage treatment
- c. Stormwater Management: Treatment & Disposal
- d. Roading & Traffic
- e. Potential for Flooding and Floor Levels
- f. Could you please advise if there are other subjects that should be covered in reports/ evidence within the "Engineering" subject area. **As noted above, an assessment of the potential for the broader ambit of hazards that may exist onsite is one that comes to mind; however, that may just confirm that no such hazards exist.**

Our engineering team advise:

1. We understand that potable water is provided by the Hurunui District Council to the Ashley township. We intend to contact the HDC to confirm that there is sufficient water available to service the proposed 90 lots. Is there any need to discuss potable water supply with WDC? **No, we simply need confirmation from HDC that capacity is available.**
2. With respect to sewer, what is the councils' expectations/requirements for sewer? **The Council has no defined level of service for SETZ zones. Both gravity and pressure sewer could be considered at this site. A STEP sewer system would not be acceptable.**
3. At which location can we connect our proposed pump station? **Connection is available at the existing gravity manhole at the intersection of Fawcetts Road and Cones Road.**
4. Is there capacity for the proposed density/lot numbers as specified above? **Yes, there is capacity available in both the gravity line down Cones Road (from the manhole mentioned above) and the Rakahuri Pumpstation next to the Ashley River.**
5. With respect to Stormwater treatment and disposal, what is councils' expectations/requirements for stormwater? **Stormwater treatment shall be provided and Stormwater Attenuation for both the 5 year and 50 year rain events. Guidance is available in the Councils Engineering Code of Practice. At which location can we discharge from our proposed SMA? There is no formal stormwater system downstream of the site so Council would need to work with the applicant to determine the most appropriate discharge location, based on an initial assessment by the submitter.**

Could you also confirm that the suggested dates that I have mentioned in my previous email below are correct and acceptable to the WDC Plan Review team. I am especially concerned that we have sufficient time in which to discuss time for the Plan Review team to consider our proposed detailed report/ evidence submission, provide feedback, then section 42A report, and for us then to be able to provide any further information raised through that process. **As noted above, Council is also aware of the timing issues that the hearing schedule creates and as such our focus will be on ensuring that we firstly respond to the formal evidence put forward in relation to the rezoning requests. This is also to ensure that there is an equitable process before and after evidence is received across the range of rezoning submissions. In order to assist submitters generally, Council is intending to issue a memo in the next week or so that details where several sources of information may be found to benefit submitters. I would note however that this memo is primarily targeted at submitters that do not have professional representation, and as such will not be at a site specific level.**

Thank you very much Matt.

We look forward to hearing from you shortly.

Peter

From: Peter Glasson <peterg@do.nz>
Sent: Wednesday, November 22, 2023 11:01 AM
To: Matthew Bacon <matthew.bacon@wmk.govt.nz>
Subject: RE: [#DO37211] 37211: Rezoning of 2 Auckland Street, Ashley

Caution: [THIS EMAIL IS FROM AN EXTERNAL SOURCE] DO NOT CLICK links or attachments unless you recognise the sender email

Hi Matt

2 AUCKLAND STREET, ASHLEY: PROPOSED REZONING OF PROPERTY TO SETTLEMENT ZONE (SETZ)

Thank you very much for your email response Matt. I think your proposal for a list of questions prior to meeting is efficient. The submission of Alistair Cameron seeks the rezoning of the 8.0 hectare site from RLZ under the Proposed District Plan to SETZ. Almost all of the existing sites in the Ashley village are already developed with a dwelling. The Cameron property directly abuts the existing township on the eastern side of the township.

With respect to services, it is proposed that potable water will be supplied by the Hurunui District Council and sewage will be reticulated and managed by WDC. Stormwater will be managed with an on site stormwater retention basin with

APPENDIX B

Water Capacity Email

Clement Maloney

From: Cynthia Otto <Cynthia.Otto@hurunui.govt.nz>
Sent: Tuesday, 30 January 2024 1:28 pm
To: Clement Maloney
Subject: 2 Auckland Street, Ashley water

Follow Up Flag: Follow up
Flag Status: Flagged

Please be cautious with links and attachments

This email was sent outside of Davis Ogilvie

Hi Clement,

Just to confirm our discussion earlier:

- There is sufficient water supply within the scheme but this will need to be confirmed with the modelling application.
- There may be local upgrades required to enable the supply of proposed units to this property, but this will only become apparent once the water application has been modelled.

Did just also want to highlight that 31 units was modelled and approved in 2021, but if smaller lots were being considered, then half units (900 litres per day) can be applied to this subdivision.

Please feel free to contact me if you have any further questions or concerns.

Kind regards,

Cynthia Otto | *Customer Support Team Leader*
Phone: 027 808 9528



hurunui.govt.nz
"Making our district even better"

APPENDIX C

Service Confirmation

11/01/2024- via email

Network Reference: 00060409



MainPower New Zealand Limited
172 Fernside Road, RD 1 Kaiapoi 7691
PO Box 346, Rangiora 7440
T. 0800 30 90 80

A Cameron
C/- Davis Ogilvie & Partners Ltd
24 Moorhouse Avenue
Christchurch 8011

Dear Alastair,

Re: Power Connection for Proposed Subdivision. Lot 1 DP394101 54 Canterbury Street Ashley

MainPower confirms that the High voltage Network in the vicinity of 54 Canterbury Street Ashley has the capacity to supply the proposed subdivision.

This letter is to advise you that MainPower's network has the capacity for the proposed subdivision. This does not mean that there is an electrical supply to the boundary of the proposed lots.

Please do not hesitate to contact the MainPower NZ Ltd NSR Team on 03 311 8311 or NSR@mainPower.co.nz if you have any questions.

Yours sincerely,

Matthew Bate
Network Services Representative

If you have any concerns about MainPower's services please call MainPower on 0800 30 90 80 to access our free, Complaint Resolution Service. If we are unable to resolve your concern you can contact the free, independent Utilities Disputes Ltd on 0800 22 33 40 or visit www.utilitiesdisputes.co.nz

www.mainpower.co.nz

Chorus Property Development Team

PO Box 9405
Waikato Mail Centre
Hamilton 3200
Telephone: 0800 782 386
Email: develop@chorus.co.nz

C H O R U S

5 August 2021

Chorus Ref #: RR64049

Your Ref #:

C- Davis Ogilvie & Partners Ltd

Attention: **Clement Maloney**

Dear Sir / Madam

Property Development – RR: 2 Auckland Street, Ashley, Waimakariri District. 49 Lots (Lots 1-49) Simple Estimate

Thank you for your enquiry regarding the above subdivision.

Chorus is pleased to advise that, as at the date of this letter, we would be able to provide ABF telephone reticulation for this property development. In order to complete this reticulation, we require a contribution from you to Chorus' total costs of reticulating the development. Chorus' costs include the cost of network design, supply of telecommunications specific materials and supervising installation. At the date of this letter, our estimate of the contribution we would require from you is \$67,620.00 (including GST).

We note that (i) the contribution required from you towards reticulation of the development, and (ii) our ability to connect the subdivision to the Chorus network, may (in each case) change over time depending on the availability of Chorus network in the relevant area and other matters.

If you decide that you wish to undertake reticulation of this property development, you will need to contact Chorus (see the contact details for Chorus Property Development Team above). We would recommend that you contact us at least 3 months prior to the commencement of construction at the subdivision. At that stage, we will provide you with the following:

- confirmation of the amount of the contribution required from you, which may change from the estimate as set out above;
- a copy of the Contract for the Supply and Installation of Telecommunications Infrastructure, which will govern our relationship with you in relation to reticulation of this property development; and
- a number of other documents which have important information regarding reticulation of the property development, including - for example - Chorus' standard subdivision lay specification.

Yours faithfully



Maia Luxford Sullivan
Property Development Coordinator