

Application for Resource Consent: Land Use

Resource Management Act 1991 – Form 9

Submit this form online at: onlineservices.ccc.govt.nz; or

Email to: resourceconsentapplications@ccc.govt.nz; or

Deliver to: Resource Consents Unit, Christchurch City Council, 53 Hereford Street, Christchurch; or

Send to: Resource Consents Unit, Christchurch City Council, PO Box 73013, Christchurch Mail Centre, Christchurch, 8154

For enquiries phone: (03) 941 8999 or email DutyPlanner@ccc.govt.nz

About this form

This form is used to apply for a land use consent under Section 88 of the Resource Management Act 1991. It must be accompanied by plans and other supporting information.

A deposit must be paid before processing will commence (refer to the Resource Management [Fee Schedule](#)). We will issue an invoice when the application has been received.

Applications are checked for completeness prior to acceptance. Please ensure that you have compiled your documents carefully to avoid delays accepting your application. A checklist is included at the end of this form.

Please also refer to the important information contained in Sections 13 and 14 of this form.

1. Pre-application advice

Have you had a pre-application meeting or discussions with any Council staff about this proposal?

Yes

No

If yes, what was the name of the planner or other staff member(s)?

Various discussions and correspondence with Sean Ward and Ra...

Date of pre-application meeting / advice (if applicable):

Pre-application reference number:

2. Application site

Street address:

17-21 Aruhe Road

Legal description:

Lot 37 Deposited Plan 572509, Lot 38 Deposited Plan 572509, Lot 39 Deposited Plan 572509



I have provided a Record of Title less than 3 months old, including a copy of any consent notice, covenant or other encumbrance to which the Council is a party. Note: These can be obtained from Land Information New Zealand:

<https://www.linz.govt.nz/land/land-records/order-copy-land-record/land-record-order-form>

OR



If it is needed for the processing of this application, I request that the Council obtain the Record of Title and any relevant encumbrances from Land Information New Zealand.

Full name and postal address of each owner and occupier of the application site (if different to the applicant):

NTP Holdings Limited - 15 Showplace, Addington, PO Box 13046, Armagh, Christchurch 8141

3. Applicant

Please note that the **applicant** is responsible for the fees associated with this application, unless specified otherwise in Section 5. Where there is an agent, it is the Council's practice to communicate with both the agent and the applicant.

Full name (including middle name):

OR

Registered Company / Trust /

Organisation name:

Ecogas Limited Partnership

Contact person / Trustee names:

Paul Smith

Landline:

Mobile :

0276031789

Email:

paul.smith@pioneerenergy.co.nz

Postal Address:

The applicant is the: Owner Occupier Lessee Prospective purchaser of the application site

Other (please specify):

4. Agent

Name of agent: Landline:

Name of firm: Mobile:

Email:

Postal Address:

5. Invoicing details

All consent-related invoices are to be made out to:

Applicant (Their full details must be provided in section 3 above)

Agent

Existing 'on-account' customer Account customer name:

Other (specify below)

Name: Email:

Postal Address:

Note: Any refunds will be paid to the receipted name.

6. Description of proposal

Describe the proposed activity to be carried out on the site (e.g. to build a new dwelling with attached garage):

To construct and operate an Organics Processing Facility with associated earthworks and traffic non-compliances. Please refer to the attached AEE.

7. Areas of non-compliance

List all the areas of non-compliance with the rules in the [Christchurch District Plan](#) and any relevant National Environmental Standard (use additional pages if necessary).

Earthworks pursuant to rule 8.9.2.3 and transportation non-compliances pursuant to rule 7.4.2.3

8. Assessment of Effects

Assessment of any effects on the environment in accordance with Schedule 4 of the Resource Management Act 1991.

Please make sure your assessment covers all the matters of discretion or control in the [District Plan](#) and NES for the rules breached / triggered.

This section MUST be completed to a level of detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (use additional pages if necessary).

Please refer to the attached AEE.

9. National Environment Standard (NES)

This section relates to the [National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health](#) (NES).

The NES includes regulations controlling **soil disturbance, change of use, subdivision and removal/replacement of fuel storage systems** on properties which have been used either now or in the past for a hazardous activity or industry (known as HAIL) that may have resulted in contamination of the soil.

Please answer the following questions to determine whether the NES applies to your proposal.

Is the application site listed on Environment Canterbury's Listed Land Use Register (LLUR)?
www.llur.ecan.govt.nz. If YES, please include a copy of the LLUR statement with your application.

Yes

No

If the site is not listed on the LLUR, is an activity described on the Hazardous Substances and Industries List (HAIL) currently being undertaken on the piece of land to which this application relates, or is it more likely than not to have ever been undertaken on the land?

Yes

No

The HAIL list is available at: <https://environment.govt.nz/publications/hazardous-activities-and-industries-list-hail/>

Type of HAIL activity:

If the answer to either of the above questions is YES, then the NES may apply, depending on the proposed activity. Please identify whether the application involves any of the activities below.

(If the answer to both of the above questions is NO, you do not need to answer the remaining questions in this section).

Will the proposed activity involve disturbance of more than 25m³ of soil (per 500m² of disturbed area)?

Yes

No

Volume of soil disturbance:

Will the proposed activity involve removal of more than 5m ³ of soil (per 500m ² of disturbed area) from the site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Volume of soil removal:	<input type="text"/>	
Does the application involve changing the use of the land to one which, because the land has been subject to a HAIL activity, is reasonably likely to harm human health? (e.g. service station to office, orchard to residential)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the application involve removing or replacing a fuel storage system or parts of it?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the application involve subdivision of the land?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<p>If the answer to any of the above activity questions is also YES, then the NES <u>will</u> apply.</p> <ul style="list-style-type: none"> • Soil disturbance or removal exceeding the specified volumes requires resource consent. • Changing the land use or subdividing the land will require resource consent if the permitted activity requirements of the NES are not complied with. These include provision of a Preliminary Site Investigation carried out by a suitably qualified and experienced practitioner. • Removal or replacement of a fuel storage system will require consent if the permitted activity requirements of the NES are not complied with. 		
Does the proposed activity require resource consent under the NES?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If the answer is YES, an assessment of the application under the NES must be provided as part of your Assessment of Effects on the Environment (refer Section 10 above). A Detailed Site Investigation may be required.		

10. Other applications

Resource consents: Have you applied for or obtained any other resource consents for this project from the Christchurch City Council or Environment Canterbury?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, what type of consent and the application number?	<input type="text" value="Regional consent for air discharge, application number will be provided when r"/>	
Building consent: Have you applied for a Project Information Memorandum (PIM) or a building consent for this project?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, what is the BCN number?	<input type="text"/>	

11. Development Contributions

The following information is required for assessment of levies under the Council's [Development Contributions Policy](#).

Gross floor area means the total internal floor area of a building, measured from the exterior faces of the exterior walls, or from the centre line of a shared wall separating two buildings or tenancies, including mezzanine floors and internal balconies, plus garaging and potentially habitable accessory buildings.

Impervious surface area means the area of a lot that is covered by a hard surface that does not allow water to penetrate to ground and therefore must have drainage to allow water to be removed from the site. This includes all areas of impervious surfaces as defined in the Christchurch District Plan, and also includes roof area and any areas that are or will be compacted gravel.

Residential development

The use of land or buildings for living accommodation purposes including residential units, serviced apartments and unit/strata development, and short-term visitor accommodation in a residential unit, but excluding retirement villages and travellers' accommodation such as hotels, motels and hostels.

Existing number of residential units:	<input type="text"/>	
Number of existing residential units to be demolished or removed:	<input type="text"/>	Demolition / removal date: <input type="text"/>
Number of proposed residential units:	<input type="text"/>	
Gross floor area (m ²) of each proposed residential unit:	<input type="text"/>	
Will there be two or more attached residential units on the site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes, what is the proposed impervious surface area (m ²), including the area of roofs and hard surfaces:	<input type="text"/>	m ²

Non-residential development

The use of land or buildings for commercial premises/offices, shopping centres, supermarkets, service stations, market, bulk goods / home improvement stores, retail facilities, manufacturing industries, restaurants, warehouse/storage, retirement villages, commercial travellers' accommodation.

Existing:

Gross floor area (GFA) for each existing land use activity:

Land use:	GFA:	
		m ²
Existing impervious surface area:*		m ²

Proposed:

Gross floor area (GFA) for each proposed land use activity:

Land use:	GFA:	
		m ²
	9279.6	m ²
Proposed impervious surface area:		m ²

12. Declaration

I have completed all relevant sections of this form, and I understand that my application may be returned as incomplete if it does not include all of the relevant information.

I understand that the fees paid on lodgement **are a deposit only**, and that the Council will invoice all costs actually and reasonably incurred in processing this application.

All of the information provided with this application is, to the best of my knowledge, true and correct. I understand that all information submitted as part of an application is required to be kept available for public record, therefore the public (including business organisations, media and other units of the Council) may view this application, once submitted. It may also be made available to the public on the Council's website. If there is sensitive information in your application please let us know.



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

Date Print name

If you are signing this application on behalf of a company/trust/other entity (the applicant), you are declaring that you are duly authorised to sign on behalf of the applicant to make such an application.

Privacy information

The Council is subject to the Privacy Act 1993. For a full privacy statement see: <https://ccc.govt.nz/the-council/how-the-council-works/privacy-statement/>. If you would like to request access to, or correction of, your details, please contact us.

13. Fee information

The required deposit must be paid before processing of the application will start. A further invoice will be issued when processing has been completed if the cost of processing exceeds the deposit paid. If the processing cost is less than the deposit a refund will be issued to the **person who paid the fee**.

Where the application fee is to be charged to an **account holder** no deposit is required. Instead the actual fees will be invoiced on completion of processing.

Interim invoices may be issued on a monthly basis, including where the applicant is an account holder.

The Resource Management Fee Schedule can be viewed at: <https://ccc.govt.nz/consents-and-licences/resource-consents/resource-management-fees/>

DEBT RECOVERY – Where an invoiced amount has not been paid by the stated due date, the Council may commence debt recovery action. The Council reserves the right to charge interest, payable from the date the debt became due, and recover costs incurred in pursuing recovery to the debt.

MONITORING FEES – Please note that if this application is approved you will be required to meet the costs of monitoring any conditions applying to the consent, pursuant to Section 35 of the Resource Management Act 1991.

DEVELOPMENT CONTRIBUTIONS – Your development, if granted, may also incur development contributions under the Local Government Act 2002 in accordance with the Council's Development Contributions Policy. Any development contributions payable will be invoiced to the applicant.

14. Additional notes for the applicant

1. This application is for resource consent under the Resource Management Act 1991. When processing the application the Council can only consider relevant matters under the Resource Management Act. Please be aware that there may be a range of other matters which could affect your ability to carry out the proposed development or activity, and it is your responsibility to investigate these.
2. If your proposal involves building work or change of use of a building you may also require a building consent under the Building Act 2004. This must be applied for separately. Dependant on the nature of the proposal, other consents or licences may also be required under such legislation as the Health Act 1956 and the Sale of Liquor Act 1989.
3. You can apply for two or more resource consents that are needed for the same activity on the same form.
4. The written approval of persons the Council considers may be adversely affected by the proposal may be required as part of the application, if it is to be processed on a non-notified basis. This will be determined after the application has been lodged and assessed, and a site visit carried out.
5. Consultation with neighbours and other affected persons is at the discretion of and is the responsibility of the applicant.
6. The costs incurred in receiving and checking incomplete applications are invoiced to the applicant. To avoid delays and cost please ensure that you submit a complete application.
7. If further information is required after your application is accepted, you will be advised as soon as possible and processing of the application will be suspended until the information is received.
8. Please make sure all of the information supplied is accurate. Inaccurate information can cause difficulties at a later date, such as additional costs, delays and legal proceedings initiated by the Council and/or by other persons.
9. If resource consent is granted the applicant has a legal obligation to comply with any conditions of the consent.

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Christchurch 8013

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Christchurch 8154

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Ecogas Ōtautahi Organics Processing Facility

17-21 Aruhe Road

Assessment of Environmental Effects and Statutory Analysis –
Resource Consent Application to Christchurch City Council

16 July 2024

B&A

Urban & Environmental

Prepared for:
Ecogas Limited Partnership

B&A Reference:

CHC20599

Status:

Final Revision 01

Date:

16 July 2024

Prepared by:

A handwritten signature in black ink that reads "RCDow" with a long horizontal flourish extending to the right.

Roxanne Dow

Intermediate Planner, Barker & Associates Limited

Reviewed by:

A handwritten signature in black ink that reads "Janice" in a cursive style.

Janice Carter

Senior Associate, Barker & Associates Limited

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1.0 Applicant and Property Details

To:	Christchurch City Council
Site Address:	17-21 Aruhe Road, Hornby
Applicant Name:	Ecogas Limited Partnership
Address for Service:	Barker & Associates Ltd 61 Cambridge Terrace Christchurch Central 8013 Attention: Janice Carter and Roxanne Dow
Legal Description:	Lot 37 Deposited Plan 572509, Lot 38 Deposited Plan 572509, Lot 39 Deposited Plan 572509 (refer to Records of Title as Appendix 1)
Site Area:	2.93ha
Site Owner:	NTP Development Holdings (with Pioneer Energy being the conditional purchaser whom Ecogas ('the applicant') will lease the land from)
Christchurch City Council Zoning:	Industrial Heavy Zone
CCC Precinct:	N/A
CCC Overlays & Controls:	Christchurch International Airport Protection Surfaces
Designations:	N/A
Additional Limitations:	220kv National Grid
Locality Diagram:	Figure 1
Brief Description of Proposal:	To construct and operate an Organics Processing Facility.
Summary of Reasons for Consent:	CDP: Earthworks pursuant to rule 8.9.2.3; and transportation non-compliances pursuant to rule 7.4.2.3. It is noted that additional consents for air discharges under the CARP are required from Environment Canterbury and have been applied for separately.

2.0 Background

Ecogas Limited Partnership ('Ecogas') are applying for resource consent for the construction and operation of an Organics Processing Facility at 17-21 Aruhe Road, Hornby South, Christchurch. Ecogas propose that the facility will process organic feedstock material by anaerobic digestion and biomass processing to produce energy, biogas, biomass fuel and biofertilizer.

Ecogas are a 100% New Zealand-owned company that currently operates an Organics Sorting and Consolidation site at Papakura and an Organics Processing Facility utilising anaerobic digestion (AD) at Reporoa. Anaerobic digestion technology is used worldwide for processing similar feedstocks in locations such as Sydney, London, and Edinburgh. Examples of anaerobic digestion technology used in Canterbury include Fonterra's Milk processing plant in Darfield.

Biomass fuel use and demand is growing as it provides an alternative to burning fossil fuels for energy and heat. Pioneer Energy, the major partner in Ecogas, is experienced in producing and using biomass as a renewable fuel for industry. Ecogas are proposing a similar facility to that which operates at Reporoa for Ōtautahi Christchurch. The facility will have capacity to receive 100,000 tonnes per annum and will include an AD and biomass fuel facility. Organics will be received, processed, and stored using fully enclosed plant and equipment. Full details of the process are detailed in the subsequent proposal section of this report and supporting documents.

The site and surrounding area are zoned Industrial Heavy within the Christchurch District Plan ('CDP') and also lie within the South West Hornby Outline Development Plan ('ODP') area. 'Industrial Activities' and 'Heavy Industrial Activities' are listed as permitted activities in the Industrial Heavy Zone and are defined below:

Industrial Activity means: the use of land and/or buildings for manufacturing, fabricating, processing, repairing, assembly, packaging, wholesaling or storage of products. It excludes high technology industrial activity, mining exploration, quarrying activity, aggregates-processing activity and heavy industrial activity.

Heavy Industrial Activity means:

- a. blood or offal treating; bone boiling or crushing; dag crushing; fellmongering; fish cleaning or curing; gut scraping and treating; and tallow melting;*
- b. flax pulping; flock manufacture or teasing of textile materials for any purpose; and wood pulping;*
- c. storage and disposal of sewage, septic tank sludge or refuse;*
- d. slaughtering of animals; storage, drying or preserving of bones, hides, hoofs or skins; tanning; and wool scouring;*
- e. the burning of waste oil in the open air or in any combustion processes involving fuel-burning equipment;*
- f. any other processes involving fuel-burning equipment, which individually or in combination with other equipment, have a fuel-burning rate of up to 1000 kg/hr;*
- g. the open burning of coated or covered metal cable or wire, including metal coated or covered with varnish, lacquers, plastic or rubber;*

- h. *any activity with the potential to discharge asbestos to air, including the removal or disposal of friable asbestos, except where it complies with the Health and Safety in Employment (Asbestos) Regulations 1998 and is supervised and monitored by Occupational Safety and Health staff;*
- i. *burning out of the residual content of metal containers used for the transport or storage of chemicals;*
- j. *the burning of municipal, commercial or industrial wastes, whether by open fire or the use of incinerators for disposal of waste;*
- k. *any industrial wood pulp process in which wood or other cellulose material is cooked with chemical solutions to dissolve lining, and the associated processes of bleaching and chemical and by-product recovery; and*
- l. *crematoriums and embalming services.*

Based on the definitions provided in the CDP it is considered that the activities proposed on the site are industrial activities. The activities are not specifically covered by the definition of 'Heavy Industrial activity'.

Resource consent for a restricted discretionary activity is required as the proposal does not comply with provisions under the CDP with regard to transportation and earthworks. It is considered that the incompleteness of the spine road identified as Road 'C' in the ODP has already been consented for the proposed development under RMA2022/163 (**Appendix 2**), but the traffic assessment covers this issue in any case.

It is noted that an additional consent is required from Environment Canterbury with regard to air discharge. This has been applied for, and information on the meteorology of the site and background air quality has been detailed in this regional application.

This Assessment of Environmental Effects ('AEE') has been prepared in accordance with the requirements of Section 88 of and Schedule 4 to the Resource Management Act 1991 ('the Act') and is intended to provide the information necessary for a full understanding of the activity for which consent is sought and any actual or potential effects the proposal may have on the environment.

2.1 Existing consents

It is noted that there are a number of existing consents relevant to the subject site. These are detailed below and are included in **Appendix 2**.

- RMA/2022/2363 – Global land use consent to reduce the minimum road boundary setbacks from 20m to 1.5m for internal roads; and
- RMA/2022/163 – Subdivision to create 42 fee simple allotments and undertake associated earthworks, including remediation works. It is noted that this application also allowed for development to occur prior to the construction of the spine road identified as Road 'C' in the ODP being completed.

Given the above consents have already been obtained neither the minimum internal road boundary setback of 20m in the CPD, nor the requirement for the construction of the spine road identified as Road 'C' prior to development of the site, have been considered.

It is noted that a Site Validation Report was prepared for the site by Eliot Sinclair and is included as **Appendix 3**. This concludes that samples taken from the remediated areas were detected below the applicable standard in regulation 7 of the NESCS, BRANZ and ANZECC guidelines and is therefore deemed suitable for the intended Commercial/Industrial land use with no further consents required under the NESCS. The site is classified as 'HAIL remediated'.

3.0 Consultation and Engagement

Ecogas as 'the applicant' have been undertaking engagement with key stakeholders, the adjacent community and Ngāi Tahu, along with representatives from Environment Canterbury and Christchurch City Council. This engagement is ongoing, the engagement undertaken to date is summarised in **Appendix 4** and will be updated throughout the process.

4.0 Site Context

4.1 Site Description

The subject site is located at 17-21 Aruhe Road in Hornby and comprises three Records of Title with a combined total area of 2.93ha (see **Appendix 1** and **Figure 1**). The site is located within a recently subdivided greenfield industrial subdivision in Soth West Hornby (see RMA/2022/163 in **Appendix 2**).

Each of the individual sites has a constructed vehicle access, resulting in three accesses located across the subject site. To the east of the subject site there are stormwater reserves adjoining Aruhe Road. Overhead 220 kV national grid transmission lines transect the stormwater reserves.

The topography of the site is largely flat as shown in **Figure 2** below. There is external fencing located on the west of the subject site. Aruhe Road has recently been constructed and stops at the western end of the northern boundary of the subject site.



Figure 1: Subject site



Figure 2: Photo taken from site visit (17 Aruhe Road facing towards State Highway 1) showing subject site

4.2 Christchurch City Council District Plan Zoning

The subject site is zoned Industrial Heavy under the Christchurch City Council District Plan ('CDP') with Industrial General zoning to the north of the subject site as shown in **Figure 3** below. To the north west of the subject site are residential properties zoned Rural Urban Fringe and a small area of Open Space zone, being the Islington Reserve which is shown green in **Figure 3** below.

Further west of the subject site is the boundary between Christchurch City Council and Selwyn District Council.

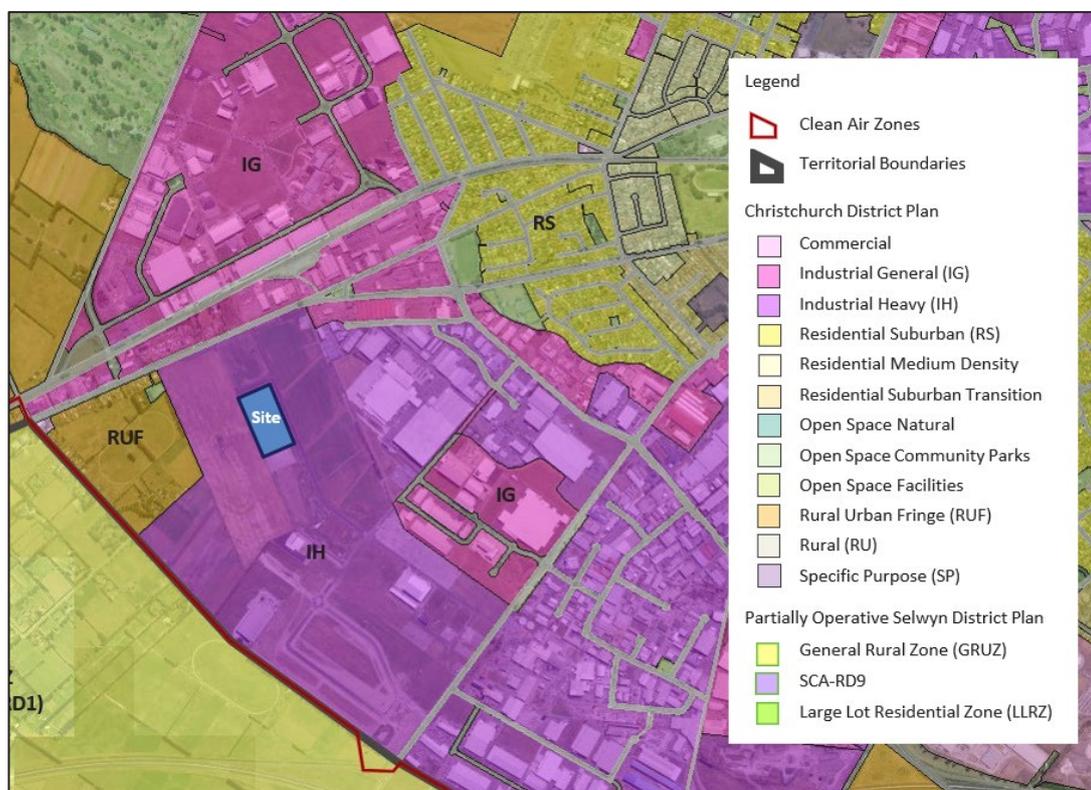


Figure 3: Subject Site with surrounding zoning

4.3 South West Hornby Industrial Area Outline Development Plan

The site is also subject to the South West Hornby Outline Development Plan ('ODP'), shown in **Figure 4** below. This shows intended future roading connections and intersection improvements.

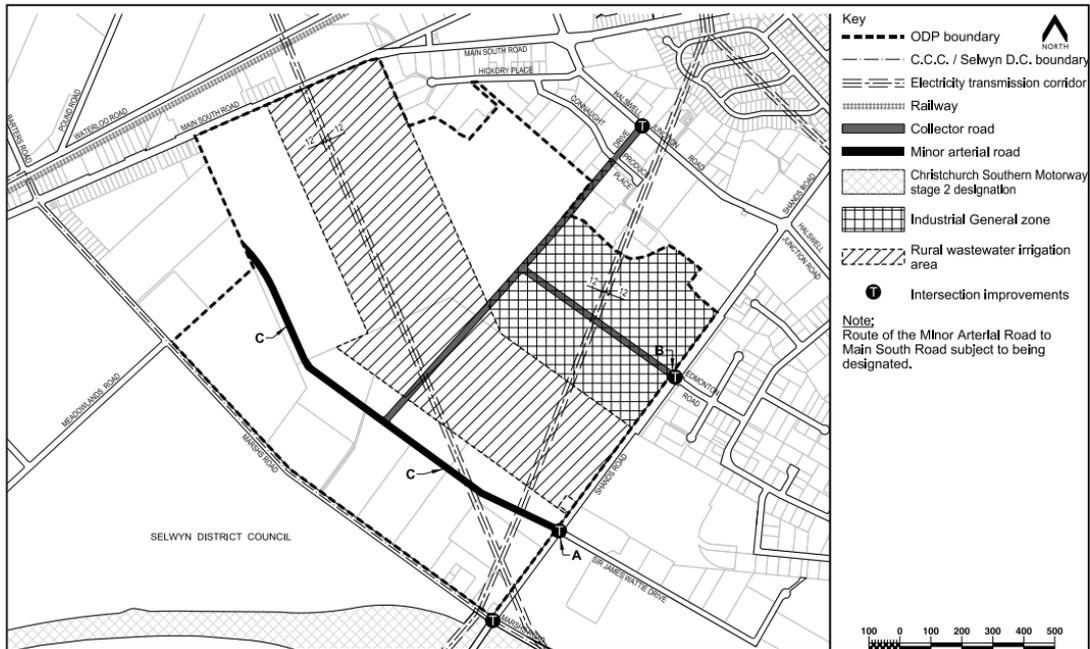


Figure 4: South West Hornby Outline Development Plan (Appendix 16.8.8. of the CDP)

4.4 Surrounding Locality

The land adjoining the subject site is zoned Heavy Industrial (see **Figure 3** above).

To the northwest of the subject site there are some residential properties and the Alpine View Holiday Park. To the east and south of the subject site are other industrial businesses such as processing industries and warehouses such as Foodstuffs to the east and Cool Tranz to the south.

To the north of the subject site is Main South Road / State Highway 1, with the Christchurch Southern Motorway to the south of the subject site. A row of residential properties is located to the north west, in the Rural Urban Fringe Zone and is shown in **Figure 5** below.

- Enclosed gas flare;
- Combined heat and power ('CHP') biogas generator;
- Biogas boilers;
- Green organics chipping and processing;
- Green organics and digestate fibre dryer;
- Site office and amenities;
- Paved yard areas;
- Stormwater management;
- Raw stormwater tank; and
- A fire water tank.

5.2 Feedstock receipt

The process operates through the receipt of feedstock to the site via trucks. The facility will source feedstock from the following main sources:

- Household food organics (scraps) and garden organics (referred to as 'FOGO');
- Commercial food organics (referred to as 'food organics');
- Commercial green organics from residential, recreational and commercial green spaces (referred to as 'commercial green organics'); and
- Industrial (organic) process organics.

Except for the woody fraction of the commercial green organics and the small woody fraction of the FOGO, all materials will be processed using Anaerobic Digestion ('AD'). The woody material will be processed into biomass fuel.

In terms of incoming volume, it is estimated that there will be 45 kerbside collection (residential feedstock) trucks per day and 10 being commercial green organics trucks per day (totalling 110 vehicle movements per day). Liquids and sludges will total 3-4 and 1-3 curtain sider commercial food truck visits per day, respectively. Table 1 in the Transport Assessment (**Appendix 6**) concludes that the total daily vehicle movements to and from the site, including staff and contractor vehicles, will be 196 per day.

Following mechanical decontamination, during which the more fibrous material is removed for processing into biomass fuel, water and/or liquid feedstock is added to the organics feedstock which is then macerated and pumped to AD tanks for processing. Biogas is collected at the top of the AD tanks and piped to boilers and/or generators.

The pre-treated feedstock will undergo a hydrolysis step in the inlet tank ahead of going to the digestors. Post inlet tank treatment, the feedstock will undergo an anaerobic digestion process to convert the feedstock to digestate (liquid biofertiliser and digestate fibre) and biogas.

5.3 Feedstock processing

The commercial and residential feedstock (food organics, commercial green organics, and FOGO) is processed in the Processing Building. Commercial food organics will have its outer packaging

removed if required, this is also completed within the Processing Building. All residential organics (also known as FOGO) will be processed within the Processing Building with the woody material (garden organics) separated for processing as a biomass fuel. The biomass fuel will be a mixture of chipped green organics and dried digestate fibre to be sold as a solid fuel alternative.

The FOGO is delivered to the Processing Building where it is shredded, screened and sorted to remove contamination to waste and the woody material for the biomass fuel process. After screening and decontamination separates the material suitable for the AD process, liquid is added and the material macerated before being sent to the AD process.

The Processing Building also accepts all the commercial green organics, along with woody portion recovered from the residential FOGO feedstock, where it is shredded and screened. All material produced will be sold as biomass fuel. When drying capacity is available some will also be dried.

Commercial food organics will be delivered to the Processing Building where it is depackaged, macerated, and then have liquid added to, as required, and then sent to the AD process.

5.4 Anaerobic digestion (AD)

Solid and liquid feedstock are directly transferred from storage areas (processing building for solids and process water tank for liquids) into multiple AD tanks. All AD tanks will be sealed and joined at the headspace level via a common gas header. The AD tanks are a sealed system with a fabric dome roof system that expands and contracts internally based on the volume of feedstock and gas present. The biogas generated from the breakdown of the feedstock builds and is held in the headspace above the AD digestate at low pressure. A regular dose of ambient air is introduced to propagate the growth of microorganisms that assist in the conversion of hydrogen sulphide (H₂S) into elemental sulphur in the biogas.

Biogas is drawn from the processing tanks, through an additional H₂S biotrickling filter system to further lower H₂S concentrations before being fed into one of the listed combustion appliances. As a back-up there will be up to two flares situated onsite to combust biogas in the case where it cannot be used in one of the biogas combustion appliances.

Biogas production is estimated to range between 1100 Nm³/hour (annual average) to 1800 Nm³/hour (peak production rate in high months).

5.5 Bio Energy processing

5.5.1 Liquid fertiliser

The digested slurry from the AD tanks will be separated into a liquid (biofertiliser) and a solid (fibre) portion via a screw press in the Process Building.

The liquid portion of digestate is used as a fertiliser after it passes through a pasteurisation step that takes place onsite. This product (known as Fertify) will be stored in onsite tanks and then transported via tanker offsite. The same unloading area of liquid feedstock will be used for the loading of the Fertify liquid product.

The solid digestate fibre component will be dried for use as a biomass fuel in a fully contained dryer with the exhaust air being treated in the onsite biofilter.

5.5.2 Biomass fuel processing

The commercial green organic and the woody fraction of the FOGO will be chipped to produce a biomass fuel (solid biofuel). The chipping will take place in the main Process Building. When excess heat is available within the plant some of the biomass fuel will be dried.

The green organic and digestate fibre dryers will be operated using biogas and will provide the necessary heat via an air-to-air heat exchanger. The biomass fuel drying will take place in a fully enclosed dryer.

Once processed these biomass fuel products will be stored in the Biomass Fuel Building then trucked offsite to customers.

5.6 Energy production

The AD process for the Ōtautahi Christchurch facility is estimated to produce up to 1,800 Nm³/hour of biogas once fully realised. There is limited storage of the biogas in the AD tank headspace, so it needs to be used as it is produced.

The CHP (combined heat and power) unit situated on site will use the biogas to produce electricity to power the site with the excess sent to the national grid. The heat that is produced by the engine will be used by Ecogas to support onsite processes such as pasteurisation and anaerobic digestion or fibre drying.

Boilers will be used to supplement the CHP heat production to provide the balance of heat to operate the site. These will be a direct biogas boiler and a dual fuel fired boiler (diesel and biogas). The diesel function will be used infrequently and mostly during the commissioning of the plant and when biogas is not available.

5.7 Biofilter

A biofilter will be used to treat the air collected within the processing building, biomass fuel building and the exhaust air from the fibre dryer to remove odorous contaminants prior to release into the surrounding environment. This is discussed more fully in the air discharge resource consent application which has been lodged with Environment Canterbury.

5.8 Site Works

Earthworks are proposed to prepare the site for development. Given the relatively flat topography of the site earthworks are required to create appropriate gradients for servicing, access, carparking and building platforms with the cut depth not anticipated to exceed 500mm except for foundation depths and to remove localised soft areas.

The total volumes of earthworks proposed is 13,000m³ of cut and 9,300m³ of fill. For full earthworks details and plans please refer to the Design Features report and Appendices prepared by Powell Fenwick included as **Appendix 7**.

Appropriate erosion and sediment control measures, and dust management practices will be imposed. These measures will remain in place throughout the duration of earthworks and are included appended to the Design Features Report in **Appendix 7**.

In order to undertake the site processes a number of buildings are proposed including a site office and an amenities building. These are shown on the site plans and shown in **Figures 6 and 7** below. A full set of detailed drawings is included as **Appendix 8**.

The anaerobic digestion side of the plant is a biological process within the tanks, feed systems and associated processing equipment, this will run 24 hours, 7 days a week. The standard operating hours when the plant will be receiving deliveries is expected to be 6am to 6pm Monday to Friday with a small number of deliveries outside these hours. Feedstock processing will extend between 6 to 7 days per week in busier periods and when maintenance is required. The plant will have a team of 15 staff with 10 staff being onsite during normal operations.

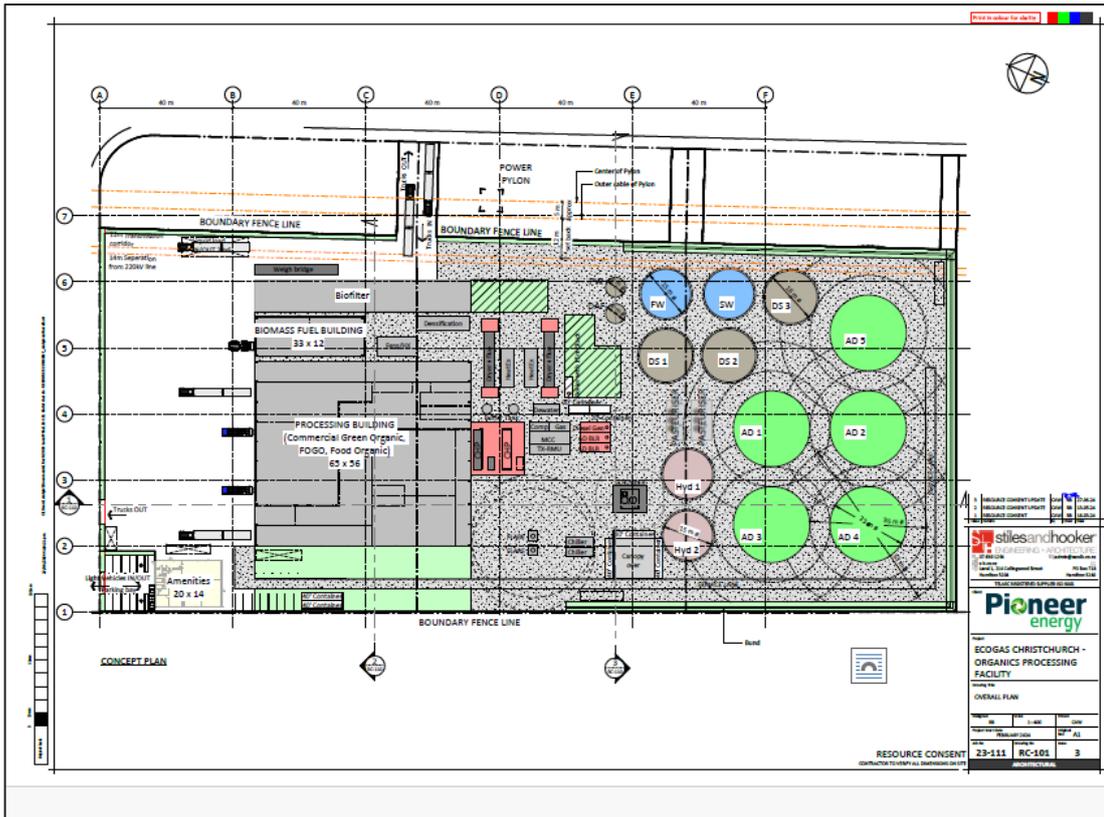


Figure 6: Site Layout

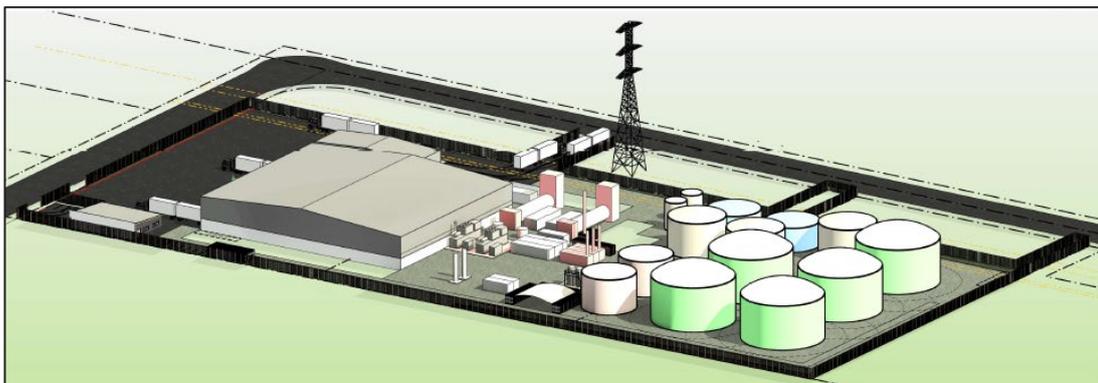


Figure 6: 3D Model of Site Layout

An Environmental Management Plan is included as **Appendix 9** which details the site operations and management, and in particular addresses any potential or actual discharges to the environment that may arrive from the activity.

5.10 Noise Mitigation Measures

A Noise Assessment has been prepared by Marshall Day and is included as **Appendix 10**. This concludes that with the implementation of mitigation measures outlined in the noise assessment the permitted noise standards will be achieved at all adjacent sites. The mitigation measures proposed, in summary, are:

- A 2.4-metre-high solid fence along a large portion of the south-western boundary;
- The use of lower noise level equipment; and
- Other specific noise controls such as steel enclosures around mixing pumps.

All the mitigation measures recommended in the noise assessment form part of the proposal.

5.11 Access and Parking

The site will be accessed using three vehicle crossings. One crossing is existing and located on the eastern side of Aruhe Road, with two access points proposed on the northern side of the subject site adjoining Aruhe Road (one as operational vehicle exit only and the other to the visitors' carpark). This arrangement is proposed to generally facilitate a one-way circulation system at the site. The proposed carparking, access and loading arrangements are summarised below. Full details can be found in the transportation report included as **Appendix 6**.

- The existing vehicle crossing is 12.0m wide and will serve as two-way access; entry for all vehicles and exit for vehicles that will need to use the weighbridge (trucks carrying fibre and biomass fuel).
- The vehicle crossing on the northern side is exit only, proposed to be 7.5m wide.
- The vehicle crossing on the northwesternmost side is two-way for the visitor car parking and is proposed to be 7.0m wide.
- 20 on-site parking spaces are proposed with 10 for staff and 10 for visitors. Access to visitor parking is from the northwesternmost vehicle crossing, separate from the other access to the site. 11 bicycle parks are proposed.
- 5 loading bays have been provided with the dimensions exceeding those specified in the district plan.
- Deliveries to the site will be typically by truck and occasionally truck and trailer. It is anticipated that the proposal will generate 24 AM network peak hour movements and 32 PM network peak hour movements. Full details on daily vehicle and peak hour movements are outlined in Tables 1 and 3 of the Transportation Assessment (**Appendix 6**).

In terms of appropriate markings and signage for staff and truck access around the site, we note that a condition of consent is proposed for these details to be provided prior to the operation of the facility.

5.12 Landscaping

Landscaping is proposed throughout the subject site as detailed in the landscaping plans included as **Appendix 11**. This includes a landscaping strip along the eastern boundary extending into the southeastern corner. The landscaping is a mix of native shrubs with some trees proposed along the western boundary.

5.13 Servicing

The servicing strategy for the development is set out in the Design Features Report prepared by Powell Fenwick and included in **Appendix 7**. A summary is provided as follows:

- **Stormwater:** A reticulated stormwater network is proposed as detailed below with any overflow being discharged to the CCC reticulated stormwater system through the stormwater reserves created through RMA/2022/163. For a detailed description of the stormwater system for the proposal refer to the Design Features Report in **Appendix 7**.
 - Operational: The reticulated stormwater network will allow for the treatment of the hardstand stormwater and conveyance of the roof and hardstand water to a buffer basin area at the southeastern corner of the site, prior to being pumped to the stormwater tank for reuse in the process facility. In the event that the buffer area volume is exceeded and the inflow rate exceeds the stormwater tank pump capacity, the stormwater is to pond in the containment area, which is sufficiently sized to hold all storm events up to and including a 1% AEP 72-hour storm event. In the unlikely event that this volume is exceeded, the stormwater is to be discharged in line with the subdivision consent (RMA/2022/163): the stormwater from the building roof areas is to discharge to ground through localised soak pits, with the stormwater collected from the hardstand areas being discharged to the CCC reticulated system stormwater reserves located between the site boundary and Aruhe Road (see **Appendix 7**, section 9.1 and 9.3).
 - Construction: Any construction phase stormwater is to be managed onsite through local diversion channels to the CCC reticulated system.
 - In the event of a spill, the stormwater system is to be fitted with an automated, constantly monitored valved diversion/shutoff system that is activated when the water has a pH of less than 6 or greater than 9, and/or the water temperature was greater than 25 degrees C, and/or the turbidity value was greater than 500 NTU.
- **Wastewater:** It is proposed to connect to the public CCC reticulated system for the amenities building including the office and toilets on site. Capacity analysis has been undertaken to determine there is sufficient capacity. The discharge complies with the requirement in the CDP to discharge no more than 0.09 litres per second per hectare of land. This equates to 0.27 litres per second for a site area of 2.93ha. The typical discharge associated with the staff facilities equates an average flow of 0.02-0.03 litres per second.
- **Water Supply:** It is proposed to utilise water from the CCC reticulated water supply, water recycling and rainwater collection. Reticulated water from CCC will supply the amenities and most of the washdown supply. Processing water will be provided through recycling, liquid feedstocks or collection of rainwater. Rainwater supply is captured from the roof area of the processing, biomass fuel and amenities buildings, as well as the carpark area and loading yard,

where it will be channelled along a basin where it will be pumped into a tank. The water systems have been designed to enable the most efficient use of water.

- **Fire Water Supply:** This is to be provided during detailed design stage, with fire and supply advice for the design to be provided by the Fire Protection Designer.

5.14 Hazardous Substances

It is noted that the proposal involves a number of hazardous substances. There are no rules in the CDP that apply specifically in relation to hazardous substances with respect to this proposal and no further consideration has been given to it.

6.0 Reasons for Consent

A rules assessment against the provisions of the Christchurch City Council District Plan ('CDP') is attached as **Appendix 12**. The site is located within the Industrial Heavy Zone. The proposal requires consent for the matters outlined below.

It is noted that the proposal is considered to be a permitted activity as it meets the definition of an Industrial activity defined below. Industrial activities are listed as a permitted activity in the Industrial Heavy zone. The proposal is not considered to fit within the definition of Heavy Industrial activity).

Industrial Activity means: the use of land and/or buildings for manufacturing, fabricating, processing, repairing, assembly, packaging, wholesaling or storage of products. It excludes high technology industrial activity, mining exploration, quarrying activity, aggregates-processing activity and heavy industrial activity.

Heavy Industrial Activity means:

- a. blood or offal treating; bone boiling or crushing; dag crushing; fellmongering; fish cleaning or curing; gut scraping and treating; and tallow melting;*
- b. flax pulping; flock manufacture or teasing of textile materials for any purpose; and wood pulping;*
- c. storage and disposal of sewage, septic tank sludge or refuse;*
- d. slaughtering of animals; storage, drying or preserving of bones, hides, hoofs or skins; tanning; and wool scouring;*
- e. the burning of waste oil in the open air or in any combustion processes involving fuel-burning equipment;*
- f. any other processes involving fuel-burning equipment, which individually or in combination with other equipment, have a fuel-burning rate of up to 1000 kg/hr;*
- g. the open burning of coated or covered metal cable or wire, including metal coated or covered with varnish, lacquers, plastic or rubber;*
- h. any activity with the potential to discharge asbestos to air, including the removal or disposal of friable asbestos, except where it complies with the Health and Safety in Employment (Asbestos) Regulations 1998 and is supervised and monitored by Occupational Safety and Health staff;*
- i. burning out of the residual content of metal containers used for the transport or storage of chemicals;*
- j. the burning of municipal, commercial or industrial wastes, whether by open fire or the use of incinerators for disposal of waste;*
- k. any industrial wood pulp process in which wood or other cellulose material is cooked with chemical solutions to dissolve lining, and the associated processes of bleaching and chemical and by-product recovery; and*

l. crematoriums and embalming services.

6.1 National Environmental Standard for Managing Soil Contaminants in Soil to Protect Human Health ('NESCS')

It is noted that a Site Validation Report was prepared for the site by Eliot Sinclair and is included as **Appendix 3**. This concludes that samples taken from the remediated areas were detected below the applicable standard in regulation 7 of the NESCS, and is therefore deemed suitable for the intended Commercial/Industrial land use and is considered to be a permitted activity under the NESCS.

6.2 Christchurch City District Plan

Chapter 7 - Transport

- The proposal activity is considered to be a high trip generator as the GFA will exceed 5000m² for an Industrial activity with 9279m² proposed, and is a **restricted discretionary activity** pursuant to Rule 7.4.2.3(RD1) as it is not otherwise permitted in the zone and is therefore not under 7.4.2.2 for controlled activities outside the central city.
- The proposal is unable to comply with standard 7.4.3.2 for the minimum number of cycle parking facilities with 11 proposed where 27 bicycle carparks are required. Accordingly, the proposal is a **restricted discretionary activity** pursuant to Rule 7.4.2.3(RD1) as the proposal is not able to meet one of the standards in rule 7.4.3.

Chapter 8 – Subdivision, Development and Earthworks

- The earthworks volumes will exceed the permitted 1000m³ per ha with 13,000m³ of cut and 9,300m³ of fill proposed. This is a **restricted discretionary activity** pursuant to Rule 8.9.2.3(RD1) as it exceeds the volume standards specified in P1 Table 9.

6.3 Activity Status

Overall, this application is for a **restricted discretionary activity**.

7.0 Public Notification Assessment (Sections 95A, 95C and 95D)

7.1 Assessment of Steps 1 to 4 (Sections 95A)

Section 95A specifies the steps the Council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

7.1.1 Step 1: Mandatory public notification is required in certain circumstances

Step 1 requires public notification where this is requested by the applicant; or the application is made jointly with an application to exchange recreation reserved land under section 15AA of the Reserves Act 1977.

The above does not apply to the proposal.

7.1.2 Step 2: If not required by step 1, public notification precluded in certain circumstances

Step 2 describes that public notification is precluded where all applicable rules and national environmental standards preclude public notification; or where the application is for a controlled activity; or a restricted discretionary, discretionary or non-complying boundary activity.

In this case, the applicable rules do not preclude public notification, and the proposal is not a controlled activity or boundary activity. Therefore, public notification is not precluded.

7.1.3 Step 3: If not required by step 2, public notification required in certain circumstances

Step 3 describes that where public notification is not precluded by step 2, it is required if the applicable rules or national environmental standards require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

As noted under step 2 above, public notification is not precluded, and an assessment in accordance with section 95A is required, which is set out in the sections below. As described below, it is considered that any adverse effects will be less than minor.

7.1.4 Step 4: Public notification in special circumstances

If an application is not required to be publicly notified as a result of any of the previous steps, then the Council is required to determine whether special circumstances exist that warrant it being publicly notified.

Special circumstances are those that are:

- Exceptional or unusual, but something less than extraordinary; or
- Outside of the common run of applications of this nature; or
- Circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

The proposal is for an Industrial activity within the Industrial Heavy Zone. While there are with some traffic and earthworks non-compliances requiring resource consent, industrial activities are permitted within the zone. In addition, it is noted that Anaerobic Digestion Technology is proven technology and is not new to New Zealand. There are other AD facilities used worldwide for processing similar feedstocks in locations such as Sydney, London and Edinburgh; in the North Island at Reporoa; and within Canterbury there are anaerobic digestors in use at the Fonterra Plant at Darfield, among others.

It is therefore considered that the application cannot be described as being out of the ordinary or giving rise to special circumstances.

There is some public interest in the proposal but that primarily stems from the issues associated with the existing Bromley composting facility. The proposal is not for composting but for organics processing using anaerobic digestion technology. Case law has also established that mere public interest in a proposal does not necessarily constitute special circumstances.

Air discharges are being separately consented under an application to Environment Canterbury.

Overall, it is considered that special circumstances do not apply to this proposal.

7.2 Section 95D Statutory Matters

In determining whether to publicly notify an application, section 95D specifies a Council must decide whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor.

In determining whether adverse effects are more than minor:

- Adverse effects on persons who own or occupy the land within which the activity will occur, or any land adjacent to that land, must be disregarded.

The land to be excluded from the assessment is listed in section 7.3 below.

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded.

In this case it is noted that an Industrial activity is permitted within the Industrial Zone .

- As a restricted discretionary activity, only those effects on persons that fall within the matters of discretion restricted under the plan can be considered.

The matters of discretion are listed in section 7.4 below.

- Trade competition must be disregarded.

This is not considered to be a relevant matter in this case.

- The adverse effects on those persons who have provided their written approval must be disregarded.

No written approvals have been sought at this stage.

The sections below set out an assessment in accordance with section 95D, including identification of adjacent properties, matters of discretion, and an assessment of adverse effects.

7.3 Land Excluded from the Assessment

In terms of the tests for public notification (but not for the purposes of limited notification or service of notice), the adjacent properties to be excluded from the assessment are shown in **Figure 7** below, and include:

To the North (Blue)

- 26 Aruhe Road;
- 24 Aruhe Road;
- 20 Aruhe Road;

To the West (Green)

- 661 Main South Road;

To the South (Light Blue)

- 15 Aruhe Road;
- 15R Aruhe Road;

To the East (Yellow)

- 21R Aruhe Road;
- 19R Aruhe Road;
- 17R Aruhe Road; and
- 637 Main South Road Islington;

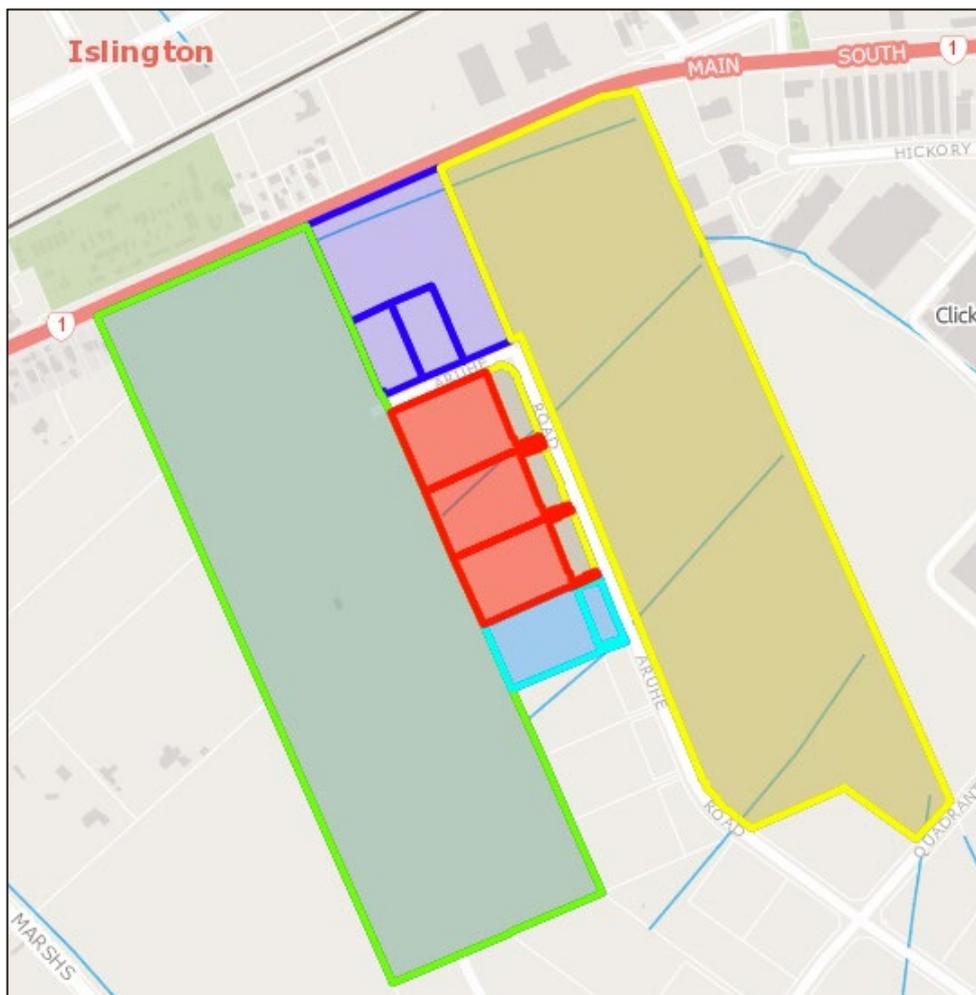


Figure 7: Adjacent properties in relation to subject site. Source: EmapsNZ.

7.4 Matters of Discretion

Under section 104C of the Act, as a restricted discretionary activity, the consent authority must consider only those matters over which it has restricted the exercise of its discretion in its plan.

These matters are:

- 7.4.4.3 Minimum number of cycle parking facilities required
 - Outside the Central City, the following are matters of discretion for Rule 7.4.3.2:
 - Whether adequate alternative, safe and secure cycle parking and end of trip facilities (such as showers and lockers), meet the needs of the intended users, and are available in a nearby location that is readily accessible.
 - Whether the parking can be provided and maintained in a jointly used cycle parking area.
 - Whether a legal agreement has been entered into securing mutual usage of any cycle parking areas shared with other activities.
 - Whether the cycle parking facilities are designed and located to match the needs of the intended users.
 - Whether the provision, design and location of cycle parking facilities may disrupt pedestrian traffic, disrupt active frontages, or detract from an efficient site layout or street scene amenity values.
 - Whether the number of cycle parking spaces and end of trip facilities provided are sufficient considering the nature of the activity on the site and the anticipated demand for cycling.
- 7.4.4.18 – High trip generators
 - Access and manoeuvring (safety and efficiency): Whether the provision of access and on-site manoeuvring area associated with the activity, including vehicle loading and servicing deliveries, affects the safety, efficiency, accessibility (including for people whose mobility is restricted) of the site, and the transport network (including considering the road classification of the frontage road).
 - Design and Layout: Whether the design and layout of the proposed activity maximises opportunities, to the extent practicable, for travel other than by private car, including providing safe and convenient access for travel by such modes.
 - Heavy vehicles: For activities that will generate more than 250 heavy vehicle trips per day, whether there are any effects from these trips on the roading infrastructure.
 - Accessibility of the location: Whether the proposed activity has demonstrated the accessibility of the site by a range of transport modes and whether the activity's location will minimise or reduce travel to and from the activity by private vehicles and encourage public and active transport use.
 - Network effects: Having particular regard to the level of additional traffic generated by the activity and whether the activity is permitted by the zone in which it is located, whether measures are proposed to adequately mitigate the actual or potential effects on the transport network arising from the anticipated trip generation (for all transport modes) from the proposed activity, including consideration of cumulative effects with other activities in the vicinity, proposed infrastructure, and construction work associated with the activity.
 - Strategic framework: Whether the proposal is consistent with the local and regional transport policy framework.

- 8.9.4.1 – Nuisance
 - The extent to which any potential dust nuisance, sedimentation and water or wind erosion effects can be avoided or mitigated.
 - The extent to which effects on neighbouring properties, and on the road network, of heavy vehicle and other vehicular traffic generated as a result of earthworks can be avoided or mitigated.
 - The extent to which any potential changes to the patterns of surface drainage or subsoil drains can be avoided or mitigated if those changes would put the site or adjoining land at higher risk of drainage problems, inundation run-off, flooding, or raise that site's or adjoining land's water table.
 - Whether any change in ground level would be likely to impact on trees in terms of access to water and drainage.
 - The extent of any potential adverse effects on the quality of groundwater and whether any such can be avoided or mitigated.
 - The extent to which any adverse effects from noise and vibration associated with earthworks and land improvement can be avoided or mitigated, and the effectiveness of any methods to mitigate such effects.
- 8.9.4.2 - Resources and assets
 - Whether versatile soils would be lost to production or have their physical and biochemical qualities compromised.
 - In relation to National grid transmission lines and electricity distribution lines
 - the risk to the structural integrity of the National grid or electricity distribution lines;
 - compliance with NZECP 34:2001;
 - any implications arising from technical advice provided by the utility operator;
 - the effects on the ability of the utility operator to operate and upgrade and develop the National grid and/or electricity distribution lines, including on-going safe and direct access; and
 - the effects on the ability of the utility operator to operate, upgrade and develop its utility, including on-going safe and direct access.
- 8.9.4.3 Land Stability
 - Whether the earthworks affect the stability of adjoining land and its susceptibility to subsidence or erosion upon excavation taking place.
 - The extent of any alteration to natural ground levels in the vicinity and, consequently, to the height and bulk of buildings that may be erected on the site.
 - Whether the earthworks affect the future development potential of land for permitted activities, taking account of the nature of filling material proposed and the degree of compaction.
- 8.9.4.6 Amenity

- The level of alteration to existing ground levels and the degree to which the resultant levels are consistent with the surrounding environment.
- The resultant effects that result from the earthworks in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy.

7.5 Assessment of Effects on the Wider Environment

The following sections set out an assessment of wider effects of the proposal, and it is considered that effects in relation to the following matters are relevant:

- Construction effects;
- Transportation Effects (Including Roding and Access); and
- Cultural Effects

These matters are set out and discussed below.

7.5.1 Construction Effects

In order to prepare the site for development, earthworks are required to prepare and grade the site for servicing, accessways and to create a suitable building platform. The site does not contain any sites of significance to Ngāi Tahu or archaeological sites.

The site has a relatively flat topography, with earthworks required for the removal of topsoil. Construction management measures, including dust management and erosion and sediment controls will be put in place throughout the duration of the earthworks as detailed in the ESCP appended to the Design Features report (**Appendix 7**).

Dust will be managed in accordance with standard dust management techniques such as dampening of excavated surfaces and any loaded materials to minimise dust off vehicles in transit. Any accumulated dust and debris will be removed from the site to minimise the potential for dust nuisance as detailed in the appendices of the Design Features report (**Appendix 7**).

Potential loss of sediment into watercourses will be minimal as there are no nearby waterways, however to avoid loss of sediment into distant watercourses, this will be managed by the measures detailed in the erosion and sediment control plan appended to the design features report included as **Appendix 7**. These measures include silt fences, prevention of vehicles transporting sediment off site, protection of all inlets, swales, and sumps with an appropriate filter system, and de-watering pumps discharging through silt fences or other filter media. The use of best practice sediment control guidance will ensure that sediment loss is appropriately managed, avoiding or mitigating effects on the receiving environment.

While the subject site is within close proximity to 220kv transmission lines, the proposed earthworks will comply with the permitted activity standards for earthworks within 12 metres of the National Grid 220kv with no works proposed within 12m of the National Grid in order to ensure that there is no risk to the structural integrity of the line, and that the proposal does not impact on the ability of the utility operator to operate, upgrade and develop its utility, and maintain on-going safe and direct access.

The maximum depth of cut proposed is 500mm except for some soft spots as outlined in the Design Features Report. Given this maximum depth of excavation and flat topography of the site, any

alteration to the natural ground level will be minimal and is unlikely to result in land stability effects.

The earthworks will be temporary in nature and duration and will occur throughout the construction of the subject site. Upon completion of construction, all areas will be covered in hard surfaces, landscaped or revegetated with no areas of earth left exposed. Given the site's Industrial Heavy zoning, effects on amenity during construction are anticipated to be insignificant.

Overall, the proposed construction effects arising from the proposal are considered to be less than minor.

7.5.2 Transport Effects (Including Roading and Access)

A Transportation report has been prepared by Flow Traffic Consultants and is included as **Appendix 6**. This report includes an assessment of the transportation effects including the non-compliances identified and a basic ITA.

The key findings of the transportation report are summarised below:

- The non-completion of Road 'C' is not considered to have a material effect on the operation of the proposed site as there is currently sufficient access from Aruhe Road. If and when it is connected this will only improve vehicle accessibility and add further route choice to the system (however, it is considered that RMA2022/163 consents this development prior to the 'C' spine road being constructed, see **Appendix 2**). The site is considered to be mainly accessed by private vehicles, with suitable access to the arterial road network via Shands Road and Halswell Junction Road which provides further connections to State Highway 1 and 76.
- The site is considered to have good cycling accessibility, and while short of the requirements for cycle parking there are still 11 bicycle parks proposed which is considered to be sufficient as there are only 10 staff working on site at one time and minimal visitors anticipated for an activity of this nature.
- There is considered to be good visibility from all approaches with the site designed for large heavy vehicles.
- The additional peak hour volumes vehicle movements are considered to be low and are able to be accommodated safely into the surrounding road network.
- The proposed site and activity is not considered to interfere or restrict any future construction or intended operation of other developments due to its access from Aruhe Road.
- The site provides appropriate access, loading and on-site circulation.
- Noting the high-level of traffic in the Hornby area to the northeast of the site, it is considered that the proposal provides the most accessible and efficient route to avoid traffic sensitive areas in particular during peak periods.

With regard to the integration of the proposed vehicle access and wider development within the surrounding environment, it is noted that the subject site is industrial in nature, however landscape treatments are proposed on subject site and its peripheries in order to ensure that the site is integrated within the surrounding area (**Appendix 11**).

Based on the above it is considered that the transportation effects arising from the proposal will be less than minor.

7.6 Cultural Effects

It is noted that the site does not contain any sites of significance to Ngāi Tahu. The application site is not identified as being within a statutory acknowledgement area, nohoanga site, silent file areas, culturally significant site, Heritage New Zealand site, any listed archaeological sites, or cultural landscapes, identified in the district plan or in any iwi management plan. Iwi consultation is ongoing in order to minimise any potential cultural effects arising from the proposal. Consultation to date with iwi is summarised in **Appendix 4**.

7.7 Summary of Effects

Overall, it is considered that any adverse effects on the environment relating to this proposal will be less than minor.

7.8 Public Notification Conclusion

Having undertaken the section 95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory;
- Under step 2, public notification is not precluded;
- Under step 3, public notification is not required as it is considered that the activity will result in less than minor adverse effects; and
- Under step 4, there are no special circumstances.

Therefore, based on the conclusions reached under steps 3 and 4, it is recommended that this application be processed without public notification.

8.0 Limited Notification Assessment (Sections 95B, 95E to 95G)

8.1 Assessment of Steps 1 to 4 (Sections 95B)

If the application is not publicly notified under section 95A, the Council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

8.1.1 Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups; or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this proposal.

8.1.2 Step 2: If not required by step 1, limited notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and national environmental standards preclude limited notification; or the application is for a controlled activity (other than the subdivision of land).

In this case, the applicable rules do not preclude limited notification and the proposal is not a controlled activity. Therefore, limited notification is not precluded.

8.1.3 Step 3: If not precluded by step 2, certain other affected persons must be notified

Step 3 requires that, where limited notification is not precluded under step 2 above, a determination must be made as to whether any of the following persons are affected persons:

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary activity, and therefore an assessment in accordance with section 95E is required and is set out below.

Overall, it is considered that any adverse effects on persons will be less than minor, and accordingly, that no persons are adversely affected.

8.1.4 Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the Council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

In this instance, having regard to the assessment in section 7.1.4 above, it is considered that special circumstances do not apply.

8.2 Section 95E Statutory Matters

If the application is not publicly notified, a Council must decide if there are any affected persons and give limited notification to those persons. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).

In deciding who is an affected person under section 95E:

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded;
- Only those effects that relate to a matter of control or discretion can be considered (in the case of controlled or restricted discretionary activities); and
- The adverse effects on those persons who have provided their written approval must be disregarded.

These matters were addressed in section 7.2 above, and no written approvals have been obtained.

Having regard to the above provisions, an assessment is provided below.

8.3 Assessment of Effects on Persons

Wider effects, such as earthworks and transportation effects were considered in section 7.5 above and considered to be less than minor. Any adverse effects on persons will be less than minor, noting:

- All earthworks will be temporary in nature. Appropriate sediment and erosion control measures will be put in place to manage the effects for the duration of earthworks on site;
- All earthwork activities will be contained within the boundaries of the site and will not extend into any of the adjacent sites;
- Traffic movements associated with this stage of the project will be appropriately managed. As such, adverse effects relating to traffic on adjacent properties are considered to be less than minor;
- Through the inclusion of appropriate mitigation, noise limits will be met, as detailed in the noise assessment report prepared by Marshall Day;
- As detailed above a Transportation report has been prepared by Flow Transportation Consultants confirming that any transportation effects are minimal;
- The site will be operated appropriately with a number of operational mechanisms in place as detailed in the Environmental Management Plan, this report and supporting documents in order to ensure there are no adverse effects from the proposed operations on adjoining and adjacent properties;
- While the surrounding environment and adjacent properties are Industrial in nature landscaping is proposed along the boundary of the subject site in order to soften the proposed development.

8.3.1 Summary of Effects

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned properties will be less than minor. Wider effects, including earthworks and transportation effects were assessed in section 7.5 above and are considered to be less than minor.

It is considered, therefore, that there are no adversely affected persons in relation to this proposal.

8.4 Limited Notification Conclusion

Having undertaken the section 95B limited notification tests, the following conclusions are reached:

- Under step 1, limited notification is not mandatory;
- Under step 2, limited notification is not precluded;
- Under step 3, limited notification is not required as it is considered that the activity will not result in any adversely affected persons; and
- Under step 4, there are no special circumstances.

Therefore, it is recommended that this application be processed without limited notification.

9.0 Consideration of Applications (Section 104)

9.1 Statutory Matters

Subject to Part 2 of the Act, when considering an application for resource consent and any submissions received, a Council must, in accordance with section 104(1) of the Act have regard to:

- Any actual and potential effects on the environment of allowing the activity;
- Any relevant provisions of a national environmental standard, other regulations, national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement; a plan or proposed plan; and
- Any other matter a Council considers relevant and reasonably necessary to determine the application.

As a restricted discretionary activity, section 104C of the Act states that a Council:

- (1) may grant or refuse the application;
- (2) must only consider matters over which a discretion is restricted; and
- (3) if it grants the application, may impose conditions under section 108 only for those matters which it has restricted the exercise of its discretion in its plan.

9.2 Weighting of Proposed Plan Changes: Christchurch City Plan – Plan Change 5 and Plan Change 14

The changes in Plan Change 5 traverse a number of topics and chapters of the District Plan. The changes proposed across all topics seek to improve the clarity of provisions and to better reflect what was intended – achieving better outcomes for communities, and to align with national direction.

None of the changes in Plan Change 5 are considered to provide a different outcome for this application.

It is noted the Council is also undergoing Plan Change 14, being its housing intensification plan change. Given the industrial nature of the site and its Heavy Industry zoning Plan Change 14 is not considered to be relevant.

Therefore, it is considered that with respect to all matters the proposal can be assessed against the CDP provisions only.

10.0 Effects on the Environment (Section 104(1)(A))

Having regard to the actual and potential effects on the environment of the activity resulting from the proposal, it was concluded in the assessment above that any wider adverse effects relating to the proposal will be less than minor and that no persons would be adversely affected by the proposal.

Further, it is considered that the proposal will also result in positive effects including:

- The proposal is for an Organics Processing Facility which will process organic feedstocks to biogas, biomass and electricity creating renewable energy sources, biofertiliser will also be produced, reducing reliance on imported, synthetic fertiliser by Canterbury farmers;
- The proposal will create an organics processing facility which will reduce the need for additional landfills;
- The proposal will contribute to a reduction in greenhouse gas emissions; and
- The proposal utilises currently vacant Heavy Industrial zoned site for industrial use.

Overall, it is considered that any actual and potential adverse effects on the environment of allowing the activity are less than minor.

11.0 District Plan and Statutory Documents (Section 104(1)(B))

11.1 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS)

The proposal is considered to be consistent with the NESCS as a Site Validation Report has been prepared by Eliot Sinclair confirming that the site has been remediated, is able to comply with regulation 7 of the NESCS, is suitable for commercial/industrial use, and is considered to be classified as 'HAIL remediated' (see **Appendix 3**).

11.2 Objectives and Policies of the Christchurch District Plan

11.2.1 Chapter 7 – Transport

The relevant objectives and policies with regard to transportation are found in Chapter 7. These objectives and policies relate to a number of matters with the relevant objectives and policies included below.

- *7.2.1 Objective – Integrated transport system for Christchurch District*
 - *7.2.1.2 Policy - High trip generating activities*
 - *Manage the adverse effects of high trip generating activities, except for permitted activities within the Central City, on the transport system by assessing their location and design with regard to the extent that they:*
 - *are permitted by the zone in which they are located;*
 - *are located in urban areas and generate additional vehicle trips beyond what is already established or consented, unless the already established or consented vehicle trips are specifically included in rule thresholds;*
 - *are accessible by a range of transport modes and encourage public and active transport use;*
 - *do not compromise the safe, efficient and effective use of the transport system;*
 - *provide patterns of development that optimise use of the existing transport system;*
 - *maximise positive transport effects;*

- *avoid significant adverse transport effects of activities where they are not permitted by the zone in which they are located;*
- *mitigate other adverse transport effects, such as effects on communities, and the amenity values of the surrounding environment, including through travel demand management measures;*
- *provide for the transport needs of people whose mobility is restricted; and*
- *integrate and coordinate with the transport system, including proposed transport infrastructure and service improvements.*
- *7.2.1.3 Policy - Vehicle access and manoeuvring*
 - *Provide vehicle access and manoeuvring, including for emergency service vehicles, compatible with the road classification, which ensures safety, and the efficiency of the transport system.*
- *7.2.1.4 Policy - Requirements for car parking and loading*
 - *Outside the Central City: Require mobility parking spaces and loading spaces which provide for the expected needs of an activity in a way that manages adverse effects.*
- *7.2.1.5 Policy - Design of car parking areas and loading areas*
 - *Require that car parking areas and loading areas are designed to:*
 - *operate safely and efficiently for all transport modes and users;*
 - *function and be formed in a way that is compatible with the character and amenity values of the surrounding environment; and*
 - *be accessible for people whose mobility is restricted.*
 - *Require mobility parking spaces and loading spaces which provide for the expected needs of an activity in a way that manages adverse effects.*
- *7.2.2 Objective - Adverse effects from the transport system*

Enable Christchurch District's transport system to provide for the transportation needs of people and freight whilst managing adverse effects from the transport system.

- *7.2.2.1 Policy - Effects from the strategic transport network*
 - *To manage any adverse effects from the ongoing use, repair, and development of the strategic transport network, whilst recognising the national and regional scale and economic importance of this network, and the role of the strategic transport network in the recovery of Christchurch.*

The proposal is considered to be consistent with the objectives and policies of the transportation chapter. As detailed in the transportation report and assessment above, the proposal will not create adverse effects on the wider transport system and the existing transportation network is able to suitably accommodate the proposal.

The site has been designed to ensure there is suitable vehicle access, loading and on-site circulation in order for the site to be able to operate safely and efficiently. A basic ITA has been provided to confirm that the site and wider network is able to safely accommodate the proposal.

Overall, the proposal is considered to be consistent with the objectives and policies of the transport chapter.

11.2.2 Chapter 8 - Subdivision, Development and Earthworks

The relevant objectives and policies with regard to earthworks and development are found in Chapter 8. These objectives and policies relate to a number of matters with the relevant objectives and policies included below

- *8.2.3 Objective - Infrastructure and transport*
 - *Subdivision design and development promotes efficient provision and use of infrastructure and transport networks.*
 - *A legible, well connected, highly walkable, and comprehensive movement network for all transport modes is provided.*
 - *Outside the Central City, land is set aside for services which can also be used for other activities, such as pedestrian or cycle ways.*
- *8.2.3.2 Policy - Availability, provision and design of, and connections to, infrastructure*
- *8.2.3.3 Policy - Transport and access*
 - *Ensure the provision and development of comprehensive movement networks for all transport modes that:*
 - *are legible, well connected, highly walkable, safe and efficient; and:*
 - *enable access by people of all ages and physical abilities to public open space facilities, public transport, suburban centres, and community facilities and to move between neighbourhoods and the wider urban area.*
 - *Ensure movement networks enable:*
 - i. *vehicle parking, which in the Central City should be in accordance with the road classification;*
 - ii. *access to properties, including for fire appliances;*
 - iii. *street landscaping, including street trees;*
 - iv. *safety and visibility;*
 - v. *ease of navigation;*
 - vi. *surface water management, in relation to movement networks; and*
 - vii. *utility services.*
 - viii. *Ensure that, where road or property access to an existing road is created, the existing road is of an appropriate standard.*
- *8.2.3.4 Policy - Stormwater disposal*
- *District wide:*
 - i. *Avoid any increase in sediment and contaminants entering water bodies as a result of stormwater disposal.*

- ii. *Ensure that stormwater is disposed of in a manner which maintains or enhances the quality of surface water and groundwater.*
- iii. *Ensure that any necessary stormwater control and disposal systems and the upgrading of existing infrastructure are sufficient for the amount and rate of anticipated runoff.*
- iv. *Ensure that stormwater is disposed of in a manner which is consistent with maintaining public health.*
- *Outside the Central City:*
 - i. *Encourage stormwater treatment and disposal through low-impact or water-sensitive designs that imitate natural processes to manage and mitigate the adverse effects of stormwater discharges.*
 - ii. *Ensure stormwater is disposed of in stormwater management areas so as to avoid inundation within the subdivision or on adjoining land.*
 - iii. *Where feasible, utilise stormwater management areas for multiple uses and ensure they have a high quality interface with residential activities or commercial activities.*
 - iv. *Incorporate and plant indigenous vegetation that is appropriate to the specific site.*
 - v. *Ensure that realignment of any watercourse occurs in a manner that improves stormwater drainage and enhances ecological, mahinga kai and landscape values.*
 - vi. *Ensure that stormwater management measures do not increase the potential for birdstrike to aircraft in proximity to the airport.*
 - vii. *Encourage on-site rain-water collection for non-potable use.*
 - viii. *Ensure there is sufficient capacity to meet the required level of service in the infrastructure design standard or if sufficient capacity is not available, ensure that the effects of development are mitigated on-site.*
- *8.2.4 Objective – Earthworks - Earthworks facilitate subdivision, use and development, the provision of utilities, hazard mitigation and the recovery of the district.*
 - *8.2.4.1 Policy - Water quality*
 - *Ensure earthworks do not result in erosion, inundation or siltation, and do not have an adverse effect on surface water or groundwater quality.*
 - *8.2.4.3 Policy - Benefits of earthworks*
 - *Recognise that earthworks are necessary for subdivision, use and development, the provision of utilities, hazard mitigation and the recovery of the district.*
 - *8.2.4.4 Policy - Amenity*
 - *Ensure, once completed, earthworks do not result in any significant shading, visual impact, loss of privacy or other significant detraction from the amenity values enjoyed by those living or working in the locality.*
- *8.2.5 Objective - Earthworks health and safety*
People and property are protected during, and subsequent to, earthworks.

- 8.2.5.1 Policy - Land stability
 - Avoid earthworks that will create a significant risk to people and property through subsidence, rockfall, cliff collapse, erosion, inundation, siltation or overland flows.
- 8.2.5.2 Policy - Nuisance
 - Subject to Policy 8.2.4.3, ensure that earthworks avoid more than minor adverse effects on the health and safety of people and their property, and do not generate continuous or persistent noise, vibration, dust or odour nuisance.
- 8.2.5.3 Policy - Vehicle movement
 - Subject to Policy 8.2.4.3, ensure that the transportation to and from a site of earth, construction or filling material is safe and minimises adverse transport network and local amenity value effects.
- 8.2.5.4 Policy - Earthworks design
 - Ensure that earthworks over identified thresholds are designed to enable the anticipated land use.

The proposed earthworks were assessed in the above sections and were concluded to be less than minor. The earthworks are minimal and temporary in nature and are required to prepare the land for development. Minimal cut is proposed and appropriate erosion and sediment controls and dust management measures will be put in place to ensure that any potential adverse effects from the earthworks are minimised. Many of the objectives and policies outlined above have already been dealt with in RMA2022/163 which created the subdivision for the site.

The proposed new access points will comply with the transportation requirements and are considered to be of an appropriate standard.

The site is able to be appropriately serviced as outlined in the Design Features Report in **Appendix 7**. Overall, the proposal is considered to be consistent with the objectives and policies of the earthworks, subdivision and development chapter.

11.2.3 Chapter 16 - Industrial Zone

The relevant objectives and policies with regard to the Industrial Zone are found in Chapter 16 of the plan. This chapter is split into three industrial zones being, Industrial General, Industrial Heavy and Industrial Park Zone. Each of these has a different function, recognising its compatibility with surrounding land uses, anticipated level of amenity and nature and scale of activities provided for.

The site is zoned Industrial Heavy Zone with the relevant objectives and policies being:

- *Objective 16.2.1 - Recovery and economic growth of the district's industry is supported and strengthened in existing and new greenfield Industrial zones.*
 - *16.2.1.3 Policy - Range of industrial zones – recognise and provide for industrial zones with different functions that cater for a range of industrial and other compatible activities depending on their needs and effects as follows:*

Industrial Heavy Zone

- *Recognise and provide for a full range of industrial and other compatible activities that generate potentially significant effects, including relatively high levels of noise, odour,*

heavy traffic movements, and the presence of significant amounts of hazardous substances, necessitating separation from more sensitive activities.

- o 16.2.1.4 Policy – Activities in the industrial zones
 - a. *Maintain and support the function of industrial zones while, subject to Clauses (b) and (c), providing for limited non-industrial activities that:*
 - i. *are ancillary in scale (subject to Clause (d)) and on the same site as a permitted or consented activity;*
 - ii. *are not appropriate in more sensitive environments due to their potential noise, odour or other environmental effects;*
 - iii. *incorporate characteristics that are compatible with the industrial zone and do not cause an undue constraint on other permitted activities within the zone;*
 - iv. *comprise yard based supplier or trade suppliers in the Industrial General Zone;*
 - v. *provide emergency service facilities and/or community corrections facilities;*
 - vi. *support the needs of workers and businesses in the zone including food and beverage outlets, commercial services, gymnasiums, and the care of children;*
 - vii. *meet the convenience needs of residents, workers and businesses in the Industrial General Zone (Waterloo Park) in a Local Centre;*
 - viii. *are rural activities associated with the irrigation of food processing wastewater in the identified area of the Industrial Heavy Zone (South West Hornby) (Appendix 16.8.8) that is integral to the ongoing operation of an established industrial activity.;*
 - viii. *are recreation facilities in the industrial General Zone that:*
 - A. *provide for active indoor recreation activities that due to scale are not appropriately located in the Central City or a commercial centre; and*
 - B. *are located near a commercial centre to support that centre; and*
 - C. *do not give rise to reverse sensitivity effects on industrial activities, and do not undermine the ability of industrial activities to continue to operate or establish in the zone.*
 - a. *Avoid any activity in industrial zones with the potential to hinder or constrain the establishment or ongoing operation or development of industrial activities and strategic infrastructure, or with the potential to be exposed to unacceptable risk. This includes but is not limited to avoiding:*
 - ix. *sensitive activities located within the 50 dB Ldn Air Noise Contour, the Lyttelton Port Influences Overlay Area, the Woolston Risk Management Area and in proximity to the National Grid;*
 - x. *non-sensitive discretionary or non-complying activities specified by Rule 16.4.1.4 D1, Rule 16.5.1.4, and Rule 16.5.1.5 NC1 in the Woolston Risk Management Area unless the proposed activity in its location meets risk acceptability criteria appropriate to the applicable land use.*

- b. *Avoid the use of industrial zones for non-industrial activities that could adversely affect the strategic role of the Central City, District Centres and Neighbourhood Centres as focal points for commercial activities, community activities, residential activities, and other activities.*
 - c. *Provide for ancillary activities, recognising their role in supporting industry, while being incidental in scale and function to a principal activity on the same site, and not inconsistent with Clauses b. and c.*
- *Objective 16.2.2 – Effects of industrial activities*
 - a. *Adverse effects of industrial activities and development on the environment are managed to support the anticipated outcome for the zone while recognising that sites adjoining an industrial zone will not have the same level of amenity anticipated by the Plan as other areas with the same zoning.*
 - b. *The cultural values of Ngāi Tahu/ mana whenua are recognised, protected and enhanced through the use of indigenous species in landscaping and tree planting, a multi-value approach to stormwater management in greenfield areas, low impact urban design, and the protection and enhancement of wāhi tapu and wāhi taonga including waipuna.*
 - *16.2.3.2 Policy – Managing effects on the environment*

The proposal is considered to be consistent with the objectives and policies of the Heavy Industrial Zone, as the proposal is for an Organics Processing Facility which meets the definition of an industrial activity, and is a permitted activity for this zone. The activity has been designed and located as to avoid any reverse sensitivity effects. The implementation of the EMP (**Appendix 9**) and other management practices will ensure that good site practices are implemented to ensure that any discharges to the environment are avoided and minimised.

The application site is not identified as being within a statutory acknowledgement area, nohoanga site, silent file areas, culturally significant site, Heritage New Zealand site, any listed archaeological sites, and cultural landscapes, identified in the district plan or in any iwi management plan. Overall, the proposal is considered to be consistent with the objectives and policies of the Industrial Zone.

11.3 Summary

It is considered that the proposed development is generally in accordance with the objectives and policies of the Christchurch District Plan.

12.0 Part 2 Matters

Section 5 of Part 2 identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use, development and protection of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Section 6 of the Act sets out a number of matters of national importance including (but not limited to) the protection of outstanding natural features and landscapes and historic heritage from inappropriate subdivision, use and development.

Section 7 identifies a number of “other matters” to be given particular regard by Council and includes (but is not limited to) Kaitiakitanga, the efficient use of natural and physical resources, the maintenance and enhancement of amenity values, and maintenance and enhancement of the quality of the environment.

Section 8 requires Council to take into account the principles of the Treaty of Waitangi.

Overall, as the effects of the proposal are considered to be less than minor, and the proposal accords with the relevant CDP objectives, policies and assessment criteria, it is considered that the proposal will not offend against the general resource management principles set out in Part 2 of the Act.

13.0 Other Matters (Section 104(1)(C))

13.1 Mahaanui Iwi Management Plan 2013

There are no specific cultural values associated with the application site. Furthermore, the site is not within a Statutory Acknowledgement Areas, Silent File area or within an archaeological site.

The proposal will be in accordance with the Mahaanui Iwi Management Plan 2013 (IMP) for the following reasons:

- The proposed onsite earthworks will be subject to appropriate erosion and control measures (Policy P11.1).
- The proposed ECSP will ensure there will be no discharge of contaminants to water or land (WM6.8).
- The aquifers under the application site will continue to be protected (WM8.6).
- There is no groundwater take proposed as part of this application.
- The proposal is for a waste to gas processing facility that will contribute to a reduction in greenhouse gas emissions (R3.4).
- The proposed stormwater management for the industrial development includes the capture of stormwater and reuse within the process.
- The proposal will connect to the reticulated wastewater within the proximity of the site.

13.2 Record of Title Interests

The Records of Title for the site are subject to a number of interests (refer **Appendix 1**). None of these are anticipated to affect the resource consent application as discussed in **Table 1** below:

Interest	Comment
ROT: 17 Aruhe Road (Reference 1039954) - Lot 36 Deposited Plan 572509	

Covenant 12576700.9	Instrument	This covenant relates to a number of matters such as, general keeping of the land from weeds, no caravans hut, garage or sheds for residential use and not to operate any business involving placement or storage of motor vehicle bodies, wrecking, dismantling and storage of used motor bodies unless the operations are entirely within a fully enclosed building. There is nothing in this covenant which restricts the proposal from proceeding.
Easement 12576700.5	Instrument	This easement relates to the right to drain water in favour of Lot 36. This easement does not restrict the proposal from proceeding.
12576700.14 Notice	Consent	This consent notice outlines wastewater discharge restrictions and requirements that stormwater runoff be captured and disposed via rapid soakage infiltration systems that are designed to dispose of the critical 2 percent annual exceedance probability storm event. The development has been designed and serviced in accordance with the requirements of the consent notice with regards to wastewater and stormwater.
Easement 12576700.13	Instrument	This easement relates to a right to drain water. This easement does not restrict the proposal from proceeding
Easement 12576700.12	Instrument	This easement relates to the right to convey electricity. This easement does not restrict the proposal from proceeding
Easement 12576700.10	Instrument	This easement relates to a right of way, the right to convey electricity, water telecommunications, and a right to drain sewage and water. This easement does not restrict the proposal from proceeding.
Covenant 11957339.5	Instrument	This is a non-opposition covenant with Foodstuffs (South Island) Properties Limited. That the Covenantor must not, and must not assist or encourage any other person to lodge any submission to any planning proposal, building consent, resource consent, plan change or other application relating to any development on the Balance land or on any nearby land owned by the Covenantor and the covenantor will if called upon provided affected persons approval under the RMA. This is not considered to restrict this proposal from proceeding as it relates to development on the Coventees land.
Transfer 11957339.1		Transfer of a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor (Foodstuffs (South Island) Properties Limited).
Transfer 10992635.1		Transfer of a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor (Foodstuffs (South Island) Properties Limited).
ROT: 19 Aruhe Road (Reference 1039956) - Lot 38 Deposited Plan 572509		
12762909.1	Caveat	This caveat relates to an agreement for sale and purchase between NTP Development Holdings Ltd and Pioneer Energy Limited.
Covenant 12576700.9	Instrument	This covenant relates to a number of matters such as, general keeping of the land from weeds, no caravans hut, garage or sheds for residential use and not to operate any business

		involving placement or storage of motor vehicle bodies, wrecking, dismantling and storage of used motor bodies unless the operations are entirely within a fully enclosed building. There is nothing in this covenant which restricts the proposal from proceeding.
Easement 12576700.5	Instrument	This easement relates to the right to drain water in favour of Lot 38. This easement does not restrict the proposal from proceeding.
12576700.16 Notice	Consent	This consent notice relates to the electricity transmission lines and that no buildings or structures are placed 12m from the centreline and outer visible edge of any national grid support structure. No buildings or structures are proposed within 12m of the outer visible edge or centreline of the transmission lines.
12576700.14 Notice	Consent	This consent notice outlines wastewater discharge restrictions and requirements that stormwater runoff be captured and disposed via rapid soakage infiltration systems that are designed to dispose of the critical 2 percent annual exceedance probability storm event. The development has been designed and serviced in accordance with the requirements of the consent notice with regards to wastewater and stormwater.
Easement 12576700.13	Instrument	This easement relates to a right to drain water. This easement does not restrict the proposal from proceeding
Easement 12576700.12	Instrument	This easement relates to a right to convey electricity. This easement does not restrict the proposal from proceeding
Easement 12576700.10	Instrument	This easement relates to a right of way, the right to convey electricity, water telecommunications, and a right to drain sewage and water. This easement does not restrict the proposal from proceeding.
Covenant 11957339.5	Instrument	This is a non-opposition covenant with Foodstuffs (South Island) Properties Limited. That the Covenantor must not, and must not assist or encourage any other person to lodge any submission to any planning proposal, building consent, resource consent, plan change or other application relating to any development on the Balance land or on any nearby land owned by the Covenantee and the covenantor will if called upon provided affected persons approval under the RMA. This is not considered to restrict this proposal from proceeding as it relates to development on the Coventees land.
Fencing Covenant in Transfer 11957339.1		Transfer of a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor (Foodstuffs (South Island) Properties Limited).
ROT: 21 Aruhe Road (Reference 1039957) - Lot 39 Deposited Plan 572509		
12762909.1 Caveat		This caveat relates to an agreement for sale and purchase between NTP Development Holdings Ltd and Pioneer Energy Limited.
Covenant 12576700.9	Instrument	This covenant relates to a number of matters such as, general keeping of the land from weeds, no caravans hut, garage or sheds for residential use and not to operate any business involving placement or storage of motor vehicle bodies, wrecking, dismantling and storage of used motor bodies unless

		the operations are entirely within a fully enclosed building. There is nothing in this covenant which restricts the proposal from proceeding.
Easement 12576700.5	Instrument	This easement relates to the right to drain water in favour of Lot 39. This easement does not restrict the proposal from proceeding.
12576700.16	Consent Notice	This consent notice relates to the electricity transmission lines and that no buildings or structures are placed 12m from the centreline and outer visible edge of any national grid support structure. No buildings or structures are proposed within 12m of the outer visible edge or centreline of the transmission lines.
12576700.14	Consent Notice	This consent notice outlines wastewater discharge restrictions and requirements that stormwater runoff be captured and disposed via rapid soakage infiltration systems that are designed to dispose of the critical 2 percent annual exceedance probability storm event. The development has been designed and serviced in accordance with the requirements of the consent notice with regards to wastewater and stormwater.
Easement 12576700.13	Instrument	This easement relates to a right to drain water. This easement does not restrict the proposal from proceeding
Easement 12576700.10	Instrument	This easement relates to a right of way, the right to convey electricity, water telecommunications, and a right to drain sewage and water. This easement does not restrict the proposal from proceeding.
Covenant 11957339.5	Instrument	This is a non-opposition covenant with Foodstuffs (South Island) Properties Limited. That the Covenantor must not, and must not assist or encourage any other person to lodge any submission to any planning proposal, building consent, resource consent, plan change or other application relating to any development on the Balance land or on any nearby land owned by the Covenantee and the covenantor will if called upon provided affected persons approval under the RMA. This is not considered to restrict this proposal from proceeding as it relates to development on the Covenantees land.
Fencing Covenant in Transfer 11957339.1		Transfer of a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor (Foodstuffs (South Island) Properties Limited).
Fencing Covenant in Transfer 10992635.1		Transfer of a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor (Foodstuffs (South Island) Properties Limited).

14.0 Conclusion

The proposal involves the construction and operation of an Organics Processing Facility at 17-21 Aruhe Road, South West Hornby.

Based on the above report it is considered that:

- Public notification is not required as adverse effects in relation to earthworks effects and transportation effects are considered to be less than minor. There are also positive effects

including: the proposal is for an Organics Processing Facility which will process organic waste to biogas and electricity which is a renewable energy source. The facility will intercept waste that could otherwise end up in landfill and therefore potentially contribute to avoiding the creation of additional landfills. The proposal will contribute to a reduction in greenhouse gas emissions; and the proposal utilises a new vacant Industrial zoned site for industrial use;

- Limited notification is not required as the effects are considered to be less than minor;
- The proposal accords with the relevant CDP objectives and policies; and
- The proposal is considered to be consistent with Part 2 of the Act.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that it can be granted on a non-notified basis.



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R. W. Muir
Registrar-General
of Land

Identifier **1039955**
Land Registration District **Canterbury**
Date Issued 25 January 2023

Prior References
1039938

Estate Fee Simple
Area 9289 square metres more or less
Legal Description Lot 37 Deposited Plan 572509

Registered Owners
NTP Development Holdings Limited

Interests

Fencing Covenant in Transfer 10992635.1 - 20.12.2017 at 4:07 pm
Fencing Covenant in Transfer 11957339.1 - 21.12.2020 at 3:29 pm
Land Covenant (in gross) in favour of Foodstuffs (South Island) Properties Limited created by Covenant Instrument 11957339.5 - 21.12.2020 at 3:29 pm
Appurtenant hereto is a right to drain water created by Easement Instrument 12576700.5 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.5 are subject to Section 243 (a) Resource Management Act 1991
Land Covenant in Covenant Instrument 12576700.9 - 25.1.2023 at 4:59 pm
Subject to a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water over parts marked N and Q on DP 572509 created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
Appurtenant hereto is a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.10 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to convey telecommunications over part marked N on DP 572509 in favour of Enable Networks Limited created by Easement Instrument 12576700.12 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.12 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to drain water over parts marked Q and N on DP 572509 in favour of Christchurch City Council created by Easement Instrument 12576700.13 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.13 are subject to Section 243 (a) Resource Management Act 1991
12576700.14 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12576700.16 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12762909.1 CAVEAT BY PIONEER ENERGY LIMITED - 21.6.2023 at 4:57 pm



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




R. W. Muir
Registrar-General
of Land

Identifier **1039956**
Land Registration District **Canterbury**
Date Issued 25 January 2023

Prior References
1039938

Estate Fee Simple
Area 9451 square metres more or less
Legal Description Lot 38 Deposited Plan 572509

Registered Owners
NTP Development Holdings Limited

Interests

Fencing Covenant in Transfer 10992635.1 - 20.12.2017 at 4:07 pm
Fencing Covenant in Transfer 11957339.1 - 21.12.2020 at 3:29 pm
Land Covenant (in gross) in favour of Foodstuffs (South Island) Properties Limited created by Covenant Instrument 11957339.5 - 21.12.2020 at 3:29 pm
Appurtenant hereto is a right to drain water created by Easement Instrument 12576700.5 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.5 are subject to Section 243 (a) Resource Management Act 1991
Land Covenant in Covenant Instrument 12576700.9 - 25.1.2023 at 4:59 pm
Subject to a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water over parts marked P and Z on DP 572509 created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
Appurtenant hereto is a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.10 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to convey telecommunications over part marked P on DP 572509 in favour of Enable Networks Limited created by Easement Instrument 12576700.12 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.12 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to drain water over parts marked P and Z on DP 572509 in favour of Christchurch City Council created by Easement Instrument 12576700.13 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.13 are subject to Section 243 (a) Resource Management Act 1991
12576700.14 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12576700.16 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12762909.1 CAVEAT BY PIONEER ENERGY LIMITED - 21.6.2023 at 4:57 pm



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




R.W. Muir
Registrar-General
of Land

Identifier **1039957**
Land Registration District **Canterbury**
Date Issued 25 January 2023

Prior References
1039938

Estate Fee Simple
Area 1.1125 hectares more or less
Legal Description Lot 39 Deposited Plan 572509

Registered Owners
NTP Development Holdings Limited

Interests

Fencing Covenant in Transfer 10992635.1 - 20.12.2017 at 4:07 pm
Fencing Covenant in Transfer 11957339.1 - 21.12.2020 at 3:29 pm
Land Covenant (in gross) in favour of Foodstuffs (South Island) Properties Limited created by Covenant Instrument 11957339.5 - 21.12.2020 at 3:29 pm
Appurtenant hereto is a right to drain water created by Easement Instrument 12576700.5 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.5 are subject to Section 243 (a) Resource Management Act 1991
Land Covenant in Covenant Instrument 12576700.9 - 25.1.2023 at 4:59 pm
Subject to a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water over part marked W on DP 572509 created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
Appurtenant hereto is a right of way, a right to convey electricity, water and telecommunications and a right to drain sewage and water created by Easement Instrument 12576700.10 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.10 are subject to Section 243 (a) Resource Management Act 1991
Subject to a right (in gross) to drain water over part marked W on DP 572509 in favour of Christchurch City Council created by Easement Instrument 12576700.13 - 25.1.2023 at 4:59 pm
The easements created by Easement Instrument 12576700.13 are subject to Section 243 (a) Resource Management Act 1991
12576700.14 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12576700.16 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 25.1.2023 at 4:59 pm
12762909.1 CAVEAT BY PIONEER ENERGY LIMITED - 21.6.2023 at 4:57 pm



View Instrument Details

Instrument Type	Transfer
Instrument No	10992635.1
Status	Registered
Date & Time Lodged	20 December 2017 16:07
Lodged By	Henderson, Fiona Maire Keall

Affected Computer Registers	Land District
CB16K/719	Canterbury

Transferors

Heinz Wattie's Limited

Transferees

Foodstuffs (South Island) Properties Limited

Clauses, Conditions or Intent

The transferee shall be bound by a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor

Transferor Certifications

I certify that I have the authority to act for the Transferor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Robert Frederick Bennett as Transferor Representative on 20/12/2017 09:00 AM

Transferee Certifications

I certify that I have the authority to act for the Transferee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Michael Wayne Kerr as Transferee Representative on 20/12/2017 09:34 AM

*** End of Report ***



View Instrument Details

Instrument Type	Transfer
Instrument No	11957339.1
Status	Registered
Date & Time Lodged	21 December 2020 15:29
Lodged By	Henderson, Fiona Maire Keall

Affected Records of Title	Land District
CB16K/719	Canterbury

Description of Part

12.6108 hectares, being that part of RT CB16K/719 shown as Lots 1 and 3 on Deposited Plan 549428

Transferors

Foodstuffs (South Island) Properties Limited

Transferees

NTP Development Holdings Limited

Clauses, Conditions or Intent

The transferee shall be bound by a fencing covenant as defined in Section 2 of the Fencing Act 1978 in favour of the transferor

Transferor Certifications

I certify that I have the authority to act for the Transferor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Fiona Maire Keall Henderson as Transferor Representative on 21/12/2020 02:30 PM

Transferee Certifications

I certify that I have the authority to act for the Transferee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period



View Instrument Details

Signature

Signed by David Millar Lang as Transferee Representative on 21/12/2020 02:37 PM

***** End of Report *****

View Instrument Details



Instrument No 11957339.5
Status Registered
Date & Time Lodged 21 December 2020 15:29
Lodged By Henderson, Fiona Maire Keall
Instrument Type Land Covenant under s116(1)(a) or (b) Land Transfer Act 2017



Affected Records of Title	Land District
944685	Canterbury

Annexure Schedule Contains 5 Pages.

Covenantor Certifications

I certify that I have the authority to act for the Covenantor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by David Millar Lang as Covenantor Representative on 21/12/2020 01:47 PM

Covenantee Certifications

I certify that I have the authority to act for the Covenantee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Michael Wayne Kerr as Covenantee Representative on 21/12/2020 12:14 PM

*** End of Report ***

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

Form 26

Covenant Instrument to note land covenant

(Section 116(1)(a) & (b) Land Transfer Act 2017)

Covenantor

NTP DEVELOPMENT HOLDINGS LIMITED

Covantee

FOODSTUFFS (SOUTH ISLAND) PROPERTIES LIMITED

Grant of Covenant

The Covenantor, being the registered owner of the burdened land(s) set out in Schedule A, **grants to the Covantee** (and, if so stated, in gross) the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s).

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of covenant	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Non-opposition covenant	Lot 9 Deposited Plan 343592, Lot 2 Deposited Plan 397987, Lots 1 and 3 Deposited Plan 549428	Lot 9 Deposited Plan 343592, Lot 2 Deposited Plan 397987, Lots 1 and 3 Deposited Plan 549428 (944685)	In gross

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

Covenant rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required.

Continue in additional Annexure Schedule if required.

The provisions applying to the specified covenants are those set out in:

{Memorandum number _____, registered under section 209 of the Land Transfer Act 2017}.

Annexure Schedule 1.

Annexure Schedule 1

1. Background

- 1.1 The Covenantor is the registered owner of the Burdened Land.
- 1.2 The Covenantee is the registered owner of the Balance Land.
- 1.3 The Covenantor and Covenantee have agreed that the Burdened Land shall be subject to the covenants set out in this Instrument for the benefit of the Covenantee in gross.

2. Definitions and interpretation

- 2.1 For the purposes of this Instrument:

Balance Land means the land comprised in Record of Title 944686;

Burdened Land means the land specified as the burdened land in Schedule A;

Covenantee means Foodstuffs (South Island) Properties Limited, its associated companies and entities;

Covenantor means the registered owner of the Burdened Land from time to time, including its successors in title to the Burdened Land;

District Plan means any operative or proposed plan relevant to the Christchurch District under the RMA;

Instrument means this instrument together with all annexure schedules attached to it;

Lodge any Submission means (without limitation) personally or through any agent or servant (including by being a member of any group or society, whether incorporated or not), directly or indirectly lodge or support in any way any objection or submission to any Planning Proposal and includes (without limitation) taking part in any planning hearing, Council feedback or forum, or appeal arising in respect of any Planning Proposal whether as a party or otherwise;

Planning Proposal means any designation application, resource consent application, application for variation, amendment or extension of a consent, or application for change or variation to the District Plan under the RMA for any matter the Covenantee desires in relation to any development on the Balance Land or on any nearby land owned by the Covenantee, including (but not limited to) any commercial activities on the Balance Land or any nearby land owned by the Covenantee;

Relevant Authorities means the government, local, statutory or non-statutory authorities or bodies having jurisdiction over the Balance Land and the Burdened Land and **Relevant Authority** means any one of them; and

RMA means the Resource Management Act 1991.

3. Non-opposition covenants

- 3.1 The Covenantor must not, and must not assist or encourage any other person to Lodge any Submission to any Planning Proposal, building consent, resource consent, plan change, or other application relating to any development on the Balance Land or on any nearby land owned by the Covenantee.

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- 3.2 The Covenantor will, if called upon to do so by the Covenantee, provide affected person's approval under the RMA in respect of any such Planning Proposal.

4. Indemnity

- 4.1 The Covenantor shall indemnify and keep indemnified the Covenantee from all losses, damages, staff costs, legal costs and other costs and expenses for which the Covenantee shall or may become liable or suffer or in respect of or arising from any loss, damage, or injury from any cause to property, persons, occasion or contributed to by any act, omission, neglect, breach or default by the Covenantor or its employees or agents in the course of performing the Covenantor's obligations under this Instrument or arising from the Covenantor's failure to perform any of its duties under this Instrument.

5. Severability

- 5.1 If any of the provisions of this Instrument are judged unlawful or unenforceable for any reason whatsoever by a Court of competent jurisdiction, such invalidity, unenforceability or illegality shall not affect the operation, construction or interpretation of any other provision of this Instrument to the intent that the invalid, unenforceable or illegal provisions will be treated for all purposes as severed from this Instrument.

6. No Waiver

- 6.1 No failure or delay by the Covenantee to exercise any right under this Instrument shall constitute a waiver of that or any other right, nor shall the value or delay restrict any further exercise of that or any other right. No single partial exercise of a right shall preclude or restrict the further exercise of that or any other right.

7. General

- 7.1 The Covenantor covenants and agrees on behalf of the Covenantor and the Covenantor's successors in title:
- (a) to observe and perform all of the land covenants set out in this Instrument; and
 - (b) that those covenants will bind the Burdened Land in perpetuity for the benefit of the Covenantee and its successors in title.
- 7.2 The Covenantor covenants with the Covenantee not to transfer, lease or part with any interest in the Burdened Land without notifying the transferee of the provisions of this Instrument.
- 7.3 A Covenantor:
- (a) that owns or occupies a portion of the Burdened Land is bound by this Instrument only in relation to the portion of the Burdened Land owned or occupied by that Covenantor; and
 - (b) will only be liable for acts and omissions in relation to its portion of the Burdened Land under this Instrument.
- 7.4 The covenants contained in this Instrument will be enforceable only against the current registered owners or occupiers for the time being of the Burdened Land and not otherwise against their predecessors in title but without prejudice to any person/entity's liability for any breach of the covenants arising before that registered owner or occupier ceased to be the registered owner or occupier of the Burdened Land.

This approved format may be used for lodgement as an electronic instrument under the Land Transfer Act 2017

7.5 The parties agree that:

- (a) the Covenantee shall pay the costs of preparation and registration of this Instrument; and
- (b) the Covenantor shall pay any costs incurred by the Covenantee during the continuance of this Instrument and in relation to it (including without limitation enforcement costs on a solicitor/client basis).

7.6 Any notice required to be served on any party will be in writing and served in accordance with the Property Law Act 2007.

View Instrument Details



Instrument No 12576700.5
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Easement Instrument



Affected Records of Title	Land District
1039938	Canterbury

Annexure Schedule Contains 5 Pages.

Grantor Certifications

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantor Representative on 26/10/2022 12:08 PM

Grantee Certifications

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantee Representative on 26/10/2022 12:15 PM

***** End of Report *****

Form 22

Easement instrument to grant easement or *profit à prendre*

(Section 109 Land Transfer Act 2017)

Grantor

NTP DEVELOPMENT HOLDINGS LIMITED

Grantee

NTP DEVELOPMENT HOLDINGS LIMITED

Grant of Easement or *Profit à prendre*

The Grantor being the registered owner of the burdened land set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A*Continue in additional Annexure Schedule, if required*

Purpose of Easement, or <i>profit</i>	Shown (plan reference) 572509	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right to drain water	SA	Lot 42 DP 572509	Lot 38 DP 572509
	YY	Lot 43 DP 572509	Lots 37 and 38 DP 572509
	QA	Lot 43 DP 572509	Lot 37 DP 572509
	MA	Lot 44 DP 572509	Lot 36 DP 572509
	DD	Lot 45 DP 572509	Lot 33 DP 572509
	JA	Lot 46 DP 572509	Lot 35 DP 572509
	GA	Lot 47 DP 572509	Lot 34 DP 572509
	VA	Lot 54 DP 572509	Lot 39 DP 572509

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 ~~and/or Schedule 5 of the Property Law Act 2007~~

The implied rights and powers are hereby **[varied] [negated] [added to]** or **[substituted]** by:

~~[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017]~~

[the provisions set out in Annexure Schedule 2]

ANNEXURE SCHEDULE 2

Right to drain water

1. Interpretation

1.1 In this Easement Instrument unless the context otherwise requires:

Easement Area has the meaning given to it in Schedule 5 of the Land Transfer Regulations 2018.

Easement Facility in relation to a right to drain water means underground pipes, conduits, open drains, pumps, tanks (with or without headwalls), manholes, valves, surface boxes, other equipment suitable for that purpose (restricted to under the ground only), and anything in replacement or substitution;

Utilities means any structure, pole or other appurtenant structure for the provision of utilities or services supplied to or used on the land including but not limited to electricity, gas, telephone, storm water, sewage and water.

1.2 In the interpretation of this Easement Instrument:

- (a) words importing the singular or plural number shall be deemed to include the plural and singular number respectively;
- (b) the headings appearing are inserted only as a matter of convenience and in no way define, limit or describe the scope or intent of the clauses of this Easement Instrument nor in any way affect this Easement Instrument;
- (c) references to any party include that party's executors, administrators, and assigns, or being a company, its successors and assigns;
- (d) all covenants on the part of the Grantor shall be deemed to be covenants by each of the registered owners included in the term "Grantor" and shall jointly and severally bind each of the registered owners and their respective executors, administrators, successors and assigns.

2. Grant of rights, powers, and privileges

Right to drain water

2.1 The Grantee shall have the full free uninterrupted and unrestricted right liberty and licence (in common with the Grantor) at all times hereafter:

- (a) to drain water (whether sourced from rain, springs, soakage, or seepage) in a free and unimpeded flow (except during any periods of necessary cleaning and repairing) and in any quantity through the Easement Facility and over the Easement Area;
- (b) to lay, make, construct, maintain, alter or repair the Easement Facility as the Grantee shall from time to time think fit.

2.2 The Easement Facility referred to in clause 2.1(a) and (b) is the Easement Facility laid or to be laid along the Easement Area marked SA, YY, QA, MA, DD, JA, GA and VA on Deposited Plan 572509.

2.3 No power is implied in respect of any easement for the Grantor to determine the easement for breach of any provision of this Easement Instrument (whether express or implied) or for any other cause, it being the intention of the parties that the easement shall subsist until it is surrendered in writing.

3. Grantee's rights

3.1 For the purpose of performing any duty or in the exercise of any rights implied in this Easement Instrument the Grantee may:

- (a) enter upon the burdened land by the most practicable route from the nearest public street to the Easement Area and crossing the burdened land only to the extent necessary;

- (b) remain on the burdened land for a reasonable time for the purposes of completing any work;
- (c) bring on to the burdened land such materials, tools, equipment, machinery, vehicles or other things as may be necessary for the purposes of completing the necessary work;
- (d) leave any vehicle or equipment on the burdened land for a reasonable time if work is proceeding;
- (e) sink and make trenches and shafts on the Easement Area;
- (f) excavate any clay, gravel, shingle, stones, and earth from the Easement Area;
- (g) inspect, maintain, cleanse, repair, extend, remove, enlarge or replace the Easement Facility;
- (h) generally do and perform such acts and things in or upon the Easement Area as may be necessary or proper for or in relation to any of the purposes of this easement.

4. Grantor's obligations

4.1 The Grantor will not:

- (a) plant trees upon the Easement Area;
- (b) build over or erect any buildings or other improvements upon or permit any Utilities to be located within the Easement Area unless the siting and installation of such Utilities is expressly consented to in writing by the Grantee, such consent to be at the sole discretion of the Grantee;
- (c) do or permit or suffer to be done anything which may in any way injure or damage the Easement Facility or interfere with the free flow and passage of any matter through the Easement Facility. If the Grantor is in breach of this obligation the Grantor shall promptly at the Grantor's expense properly and substantially repair and make good all such injury or damage and restore such free flow and passage. If the Grantor fails to promptly comply with this obligation then the Grantee may perform the obligation and recover any costs incurred from the Grantor.

5. Grantee's obligations

5.1 The Grantee shall at its own cost:

- (a) install, maintain and cleanse the Easement Facility so that it is not or does not become a nuisance or annoyance to the Grantor;
- (b) remove and carry away all surplus clay, gravel, shingle, stones and earth which may be excavated from the Easement Area;
- (c) upon the Grantee disturbing the surface of the Easement Area for any reason, without delay restore the same as nearly as possible to its original condition;
- (d) repair and make good any damage which may be done to any fence building or improvement, or to any part of the burdened land, in the exercise by the Grantee of any of the rights granted by this Easement Instrument but the Grantee shall not be responsible for the cost of removing or damaging any fence building improvements or trees upon, or any tree roots growing within, the Easement Area as prohibited under clause 4.1(a).

5.2 Prior to exercising any of its rights under this easement instrument, the Grantee will provide written notice to the Grantor of its intention and will specify (in the notice) the work to be undertaken, who will undertake the work, the times it will be undertaken and the timeframe for completion. The parties acknowledge that when urgent work is needed to be undertaken, written notice of the work is not required.

5.3 The Grantee must not do or permit any works to be undertaken on the Burdened Land except by a Council approved contractor.

6. Limitation of liability

6.1 Any right of action which shall at any time accrue to the Grantee by reason of breach or non observance by the Grantor of any of the covenants contained in this Easement Instrument may be enforced by the Grantee only against:

- (a) the registered owner for the time being of that part of the Easement Area in respect of which such breach or non-observance shall occur; and

- (b) the registered owner at the time of such occurrence,

to the intent that the liability of any registered owner of the Easement Area shall cease (except as to any breach or non-observance occurring during the period of ownership of that registered owner) upon registration of a transfer of ownership.

7. Default

- 7.1 If the Grantor or the Grantee does not meet the obligations implied or specified in any easement:

- (a) the party not in default may serve on the defaulting party written notice requiring the defaulting party to meet a specific obligation and stating that, after the expiration of seven working days from service of the notice of default, the other party may meet the obligation;
- (b) if, at the expiry of the seven working day period, the party in default has not met the obligation, the other party may:
 - (i) meet the obligation; and
 - (ii) for that purpose, enter the burdened land.
- (c) the party in default is liable to pay the other party the cost of preparing and serving the default notice and the costs incurred in meeting the obligation;
- (d) the other party may recover from the party in default, as a liquidated debt, any money payable under this clause.

8. Arbitration

- 8.1 If any dispute arises between the parties relating to this Easement Instrument, that dispute shall be determined by a single arbitrator should the parties agree upon one, or failing agreement, by a single arbitrator to be appointed by the President for the time being of the New Zealand Law Society, in accordance with the Arbitration Act 1996 or any statute enacted in substitution of that Act and for the time being in force.

9. General provisions

- 9.1 Nothing contained or implied in this Easement Instrument shall be construed so as:

- (a) to compel the Grantee to exercise all or any of the rights granted by this Easement Instrument at any time and the Grantee may commence, discontinue or resume the exercise of all or any such rights at will;
- (b) to abrogate, limit, restrict or abridge any of the rights, powers or remedies vested in the Grantee by statute.

- 9.2 The Grantee shall pay the Grantor's reasonable costs of the preparation, registration, variation and any surrender of this Easement Instrument incurred by the Grantor in relation to preparation, registration, variation and surrender of this Easement Instrument.

- 9.3 The following provisions are applicable to the easement granted by this Easement Instrument:

- (a) the rights, powers and privileges conferred on the Grantee by this Easement Instrument are in substitution for the definition of "Easement Facility" and the rights and powers set out in clauses 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 of Schedule 5 of the Land Transfer Regulations 2018 but the remaining provisions of the Land Transfer Regulations 2018 shall apply to this Easement Instrument;
- (b) where there is a conflict between the provisions of the Fifth Schedule of the Land Transfer Regulations 2018 and the provisions of this Easement Instrument, the provisions of this Easement Instrument will prevail.

View Instrument Details



Instrument No 12576700.6
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Easement Instrument



Affected Records of Title	Land District
1039938	Canterbury

Annexure Schedule Contains 7 Pages.

Grantor Certifications

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantor Representative on 26/10/2022 12:16 PM

Grantee Certifications

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Fiona Maire Keall Henderson as Grantee Representative on 20/10/2022 02:12 PM

*** End of Report ***

Form 22

Easement instrument to grant easement or *profit à prendre*
(Section 109 Land Transfer Act 2017)

Grantor

NTP DEVELOPMENT HOLDINGS LIMITED

Grantee

CHRISTCHURCH CITY COUNCIL

Grant of Easement or Profit à prendre

The Grantor being the registered owner of the burdened land(s) set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or ~~*profit(s) à prendre*~~ set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A	<i>Continue in additional Annexure Schedule, if required</i>		
Purpose of easement or <i>profit</i>	Shown (plan reference) DP 572509	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right to drain water	BB, CC	Lot 100 DP 572509	In gross
	EE, FF	Lot 45 DP 572509	In gross
	GG, HH, II	Lot 47 DP 572509	In gross
	JJ, KK, LL	Lot 46 DP 572509	In gross
	MM, NN, PP	Lot 44 DP 572509	In gross
	QQ, RR	Lot 43 DP 572509	In gross
	SS, TT, UU	Lot 42 DP 572509	In gross
	VV, WW, XX	Lot 54 DP 572509	In gross

Form 22 – continued

Page 2 of 7

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby **[varied]** ~~**[negated]**~~ ~~**[added to]**~~ or ~~**[substituted]**~~ by:

~~**[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017]**~~

~~**[the provisions set out in Annexure Schedule 2]**~~

Form L

Annexure Schedule 2

insert instrument type

Easement

Continue in additional Annexure Schedule, if required

ANNEXURE SCHEDULE 2

Right to drain water in gross

1. Interpretation

1.1 In this Easement Instrument unless the context otherwise requires:

Utilities means any structure, pole or other appurtenant structure for the provision of utilities or services supplied to or used on the land including but not limited to electricity, gas, telephone, storm water, sewage and water.

Easement Facility in relation to a right to drain water, means pipes, conduits, open drains, pumps, tanks (with or without headwalls), manholes, valves, surface boxes, other equipment suitable for that purpose (whether above or under the ground), and anything in replacement or substitution.

Easement Area has the meaning given to it in Schedule 5 of the Land Transfer Regulations 2018.

1.2 In the interpretation of this Easement Instrument:

- (a) words importing the singular or plural number shall be deemed to include the plural and singular number respectively;
(b) the headings appearing are inserted only as a matter of convenience and in no way define, limit or describe the scope or intent of the clauses of this Easement Instrument nor in any way affect this Easement Instrument;
(c) references to any party include that party's executors, administrators, and assigns, or being a company, its successors and assigns;
(d) all covenants on the part of the Grantor shall be deemed to be covenants by each of the registered owners included in the term "Grantor" and shall jointly and severally bind each of the registered owners and their respective executors, administrators, successors and assigns.

2. Grant of rights, powers, and privileges

2.1 The Grantee (to the exclusion of the Grantor and any other party) shall have the full free uninterrupted and unrestricted right liberty and licence at all times hereafter:

- (a) to drain water (whether sourced from rain, springs, soakage, or seepage) in a free and unimpeded flow (except during any periods of necessary cleaning and repairing) and in any quantity through the Easement Facility and over the Easement Area;
(b) to lay, make, construct, maintain, alter or repair the Easement Facility as the Grantee shall from time to time think fit.

Form L

Annexure Schedule 2

Insert instrument type

Easement

Continuation of Annexure Schedule 2

- 2.2 The Easement Facility referred to in 2.1(a) and (b) is the Easement Facility laid or to be laid along the Easement Area marked BB, CC, EE, FF, GG, HH, II, JJ, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW and XX on Deposited Plan 572509.
- 2.3 No power is implied in respect of any easement for the Grantor to determine the easement for breach of any provision of this Easement Instrument (whether express or implied) or for any other cause, it being the intention of the parties that the easement shall subsist until it is surrendered in writing.
- 3. **Grantee's rights**
 - 3.1 For the purpose of performing any duty or in the exercise of any rights implied in this Easement Instrument the Grantee may:
 - (a) enter upon the burdened land by the most practicable route from the nearest public street across any part of the burdened land;
 - (b) remain on the burdened land for a reasonable time for the purposes of completing any work;
 - (c) bring on to the burdened land such materials, tools, equipment, machinery, vehicles or other things as may be necessary for the purposes of completing the necessary work;
 - (d) leave any vehicle or equipment on the burdened land for a reasonable time if work is proceeding;
 - (e) sink and make trenches and shafts on the Easement Area;
 - (f) excavate any clay, gravel, shingle, stones, and earth from the Easement Area;
 - (g) inspect, maintain, cleanse, repair, extend, remove, enlarge or replace the Easement Facility;
 - (h) generally do and perform such acts and things in or upon the Easement Area as may be necessary or proper for or in relation to any of the purposes of this easement.
- 4. **Grantor's obligations**
 - 4.1 The Grantor will not:
 - (a) plant trees upon or permit any tree roots to grow within the Easement Area;
 - (b) build over or erect any buildings or other improvements upon, or permit any Utilities to be located within, the Easement Area unless the siting, erection or location of such building or other improvements or Utilities is expressly consented to in writing by the Grantee, such consent to be at the sole discretion of the Grantee;
 - (c) do or permit or suffer to be done anything which may in any way injure or damage the Easement Facility or interfere with the free flow and passage of any matter through the Easement Facility. If the Grantor is in breach of this obligation the Grantor shall promptly at the Grantor's expense properly and

Form L

Annexure Schedule 2

Insert instrument type

Easement

Continuation of Annexure Schedule 2

substantially repair and make good all such injury or damage and restore such free flow and passage. If the Grantor fails to promptly comply with this obligation then the Grantee may perform the obligation and recover any costs incurred from the Grantor.

5. Grantee's obligations

- 5.1 The Grantee shall at its own cost:
(a) install (except where the creation of this easement is part of a subdivision in which case the Grantor will install the Easement Facility at its own cost), maintain and cleanse the Easement Facility so that it is not or does not become a nuisance or annoyance to the Grantor;
(b) remove and carry away all surplus clay, gravel, shingle, stones and earth which may be excavated from the Easement Area;
(c) upon the Grantee disturbing the surface of the Easement Area for any reason, without delay restore the same as nearly as possible to its original condition PROVIDED THAT if any building, improvements, or Utilities are erected or located within the Easement Area without the written consent of the Grantee as required by clause 4.1(b) of this instrument, then the Grantee shall not be required to restore any such building, improvements, or Utilities;
(d) repair and make good any damage which may be done to any fence building or improvement, or to any part of the burdened land, in the exercise by the Grantee of any of the rights granted by this Easement Instrument but the Grantee shall not be responsible for the cost of removing or damaging any fence building improvements or trees upon, or any tree roots growing within, the Easement Area as prohibited under clause 4.1(a).

6. Easement facility to be property of Grantee

- 6.1 The Easement Facility and any other structures, plant or equipment erected or installed by the Grantee on the Easement Area or any other structures, plant or equipment required to vest in the Grantee pursuant to a condition of a subdivision consent shall be the property of the Grantee.

7. Limitation of liability

- 7.1 Any right of action which shall at any time accrue to the Grantee by reason of breach or non-observance by the Grantor of any of the covenants contained in this Easement Instrument may be enforced by the Grantee only against:
(a) the registered owner for the time being of that part of the Easement Area in respect of which such breach or non-observance shall occur; and
(b) the registered owner at the time of such occurrence,

to the intent that the liability of any registered owner of the Easement Area shall cease (except as to any breach or non-observance occurring during the period of ownership of that registered owner) upon registration of a transfer of ownership.

Form L**Annexure Schedule 2**

Page 6 of 7

*Insert instrument type***Easement****Continuation of Annexure Schedule 2****8. Default**

8.1 If the Grantor or the Grantee does not meet the obligations implied or specified in any easement:

- (a) the party not in default may serve on the defaulting party written notice requiring the defaulting party to meet a specific obligation and stating that, after the expiration of seven working days from service of the notice of default, the other party may meet the obligation;
- (b) if, at the expiry of the seven working day period, the party in default has not met the obligation, the other party may:
 - (i) meet the obligation; and
 - (ii) for that purpose, enter the burdened land.
- (c) the party in default is liable to pay the other party the cost of preparing and serving the default notice and the costs incurred in meeting the obligation;
- (d) the other party may recover from the party in default, as a liquidated debt, any money payable under this clause.

9. Arbitration

9.1 If any dispute arises between the parties relating to this Easement Instrument, that dispute shall be determined by a single arbitrator should the parties agree upon one, or failing agreement, by a single arbitrator to be appointed by the President for the time being of the New Zealand Law Society, in accordance with the Arbitration Act 1996 or any statute enacted in substitution of that Act and for the time being in force.

10. General provisions

10.1 Nothing contained or implied in this Easement Instrument shall be construed so as:

- (a) to compel the Grantee to exercise all or any of the rights granted by this Easement Instrument at any time and the Grantee may commence, discontinue or resume the exercise of all or any such rights at will;
- (b) to abrogate, limit, restrict or abridge any of the rights, powers or remedies vested in the Grantee by statute.

10.2 The Grantor shall pay the Grantee's reasonable costs of the preparation, registration, variation and any surrender of this Easement Instrument including the staff processing costs and/or the legal costs incurred by the Grantee in relation to preparation, registration, variation and surrender of this Easement Instrument.

10.3 The following provisions are applicable to the easement granted by this Easement Instrument:

- (a) the rights, powers and privileges conferred on the Grantee by this Easement Instrument are in substitution for the definition of "Easement Facility" and the rights and powers set out in clauses 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 of

Form L

Annexure Schedule 2

insert instrument type

Easement

Continuation of Annexure Schedule 2

Schedule 5 of the Land Transfer Regulations 2018 but the remaining provisions of the Land Transfer Regulations 2018 shall apply to this Easement Instrument;

- (b) where there is a conflict between the provision of the Fifth Schedule of the Property Law Act 2007 and the Fifth Schedule of the Land Transfer Regulations 2018, the provisions of the Fifth Schedule of the Property Law Act 2007 will prevail;
- (c) where there is a conflict between the provisions of the Fifth Schedule of the Land Transfer Regulations 2018 or the Fifth Schedule of the Property Law Act 2007 and the provisions of this Easement Instrument, the provisions of this Easement Instrument will prevail.

View Instrument Details



Instrument No 12576700.9
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Land Covenant under s116(1)(a) or (b) Land Transfer Act 2017



Affected Records of Title	Land District
1039948	Canterbury
1039949	Canterbury
1039950	Canterbury
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury
1039958	Canterbury
1039966	Canterbury
1039967	Canterbury

Annexure Schedule Contains 4 Pages.

Covenantor Certifications

I certify that I have the authority to act for the Covenantor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Covenantor Representative on 26/10/2022 12:16 PM

Covantee Certifications

I certify that I have the authority to act for the Covantee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Covantee Representative on 26/10/2022 12:16 PM

*** End of Report ***

Form 26

Covenant Instrument to note land covenant

(Section 116(1)(a) & (b) Land Transfer Act 2017)

Covenantor

NTP DEVELOPMENT HOLDINGS LIMITED

Covenantee

NTP DEVELOPMENT HOLDINGS LIMITED

Grant of Covenant

The Covenantor, being the registered owner of the burdened land(s) set out in Schedule A, **grants to the Covenantee** (and, if so stated, in gross) the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s).

Schedule A

Continue in additional Annexure

Schedule, if required

Purpose of covenant	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Land covenant		1039948 - 1039958 (inclusive), 1039966 and 1039967	1039948 - 1039958 (inclusive), 1039966 and 1039967

Covenant rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required.

Continue in additional Annexure Schedule if required.

The provisions applying to the specified covenants are those set out in:

~~[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017].~~

Annexure Schedule

ANNEXURE SCHEDULE

1. INTERPRETATION

For the purposes of this Land Covenant:

“**Covenantee**” means the Developer and the registered proprietor of any Lot.

“**Covenantor**” means the registered proprietor of any Lot.

“**Developer**” means NTP Development Holdings Limited.

“**Lots**” means lots 1, 31-40 (inclusive), 52 and 53 comprised in DP 572509 and “**Lot**” means any one of them.

COVENANTS

The Covenantor covenants with the Covenantee as follows:

2. THE COVENANTOR AND THEIR SUCCESSORS IN TITLE SHALL:

2.1 Weeds, Grass and Rubbish

Not allow the accumulation of rubbish or noxious substances on unimproved land, nor allow grass and weeds to grow to a height greater than 150 mm.

2.2 Developer's Approval of Plans

Not to modify the Lot or allow to be built on any Lot any building unless the plans and specifications of the building have first been approved in writing by the Developer. In considering granting its approval, the Developer will be entitled to take into account the following matters:-

- a) Height;
- b) Siting on the Lot;
- c) External design;
- d) External materials (including the use of good quality recycled materials);
- e) Colour scheme;
- f) Landscaping, including design of and construction material(s) to be used for all fences and paved areas;
- g) Stormwater treatment.

Provided that if there is any dispute over whether the Developer has acted reasonably in withholding its approval to any particular set of plans and specifications, the dispute will be referred to the arbitration of the President of the New Zealand Institute of Architects or their nominee in accordance with the Arbitration Act 1996.

2.3 Residential Buildings

Not to build or place on the Lot any caravan, hut, garage or shed for any permanent or temporary residential use.

2.4 Non-permitted Activities

Not operate or permit to be operated on the Lot any business involving placement or storage of motor vehicle bodies, or the wrecking, dismantling and storage of used motor vehicle bodies or parts unless such business is operated entirely within a fully enclosed building.

2.5 Timely Building Progress

Not allow any building in the course of construction to be left without substantial work being carried out for a period exceeding three months, and to complete construction of such building within 24 months of the commencement of work, PROVIDED that it shall not be a breach of this covenant if any delay in the completion of construction is caused by a natural event that is outside the control of the Covenantor.

2.6 Landscaping

- a) Complete the landscaping of the Lot prior to the occupation of any building on the Lot.
- b) Maintain all landscaping on the Lot, and in the event that any tree or plant which is part of the landscaping dies, take all reasonable steps to re-plant or reinstate the landscaping.

3. EXTINGUISHMENT OF COVENANT FOR APPROVAL

- 3.1 The covenants in clause 2.2 (Developer's Approval of Plans) will cease to be of any further effect from the date that a Code Compliance Certificate has been issued for the building approved by the Developer. For the avoidance of doubt, where the Developer has approved plans on the basis that the building or buildings are to be completed in stages, the covenants in clause 2.2 will continue to apply until a Code Compliance Certificate has been issued for the final stage of the approved plans.

4. PENALTY FOR BREACH

- 4.1 If there is any breach or non-observance of any of the covenants in clause 2 above, then without prejudice to any other liability which the Covenantor might have to the Developer as Covenantee and any other persons having the benefit of these covenants, the Covenantor will upon written demand being made by the Covenantee:-
 - a) If applicable, replace any building or building material used but which were not permitted to be used;
 - b) Pay the party making the within demand the sum of \$1,000.00 (One Thousand Dollars) per day for every day that the breach or non-observance continues after a period of 15 working days from receipt of the demand.

5. AUTOMATIC CANCELLATION

- 5.1 The covenants in this instrument will immediately cease to apply to any Lot (or part thereof) which is intended to vest in the Crown or the Christchurch City Council as a road or reserve, or which is created as an electricity kiosk in any survey plan, upon the approval as to survey of such survey plan by Land Information New Zealand.

View Instrument Details



Instrument No 12576700.10
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Easement Instrument



Affected Records of Title	Land District
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury

Annexure Schedule Contains 2 Pages.

Grantor Certifications

- I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantor Representative on 26/10/2022 12:16 PM

Grantee Certifications

- I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantee Representative on 26/10/2022 12:16 PM

*** End of Report ***

Form 22

Easement instrument to grant easement or *profit à prendre*

(Section 109 Land Transfer Act 2017)

Grantor

NTP DEVELOPMENT HOLDINGS LIMITED

Grantee

NTP DEVELOPMENT HOLDINGS LIMITED

Grant of Easement or *Profit à prendre*

The Grantor being the registered owner of the burdened land set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of Easement, or <i>profit</i>	Shown (plan reference) 572509	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right of Way; Right to Convey Electricity, Water and Telecommunications; Right to Drain Sewage and Water	J	Lot 33 DP 572509 (RT 1039951)	Lot 34 DP 572509 (RT 1039952)
	K	Lot 34 DP 572509 (RT 1039952)	Lot 33 DP 572509 (RT 1039951)
	U	Lot 34 DP 572509 (RT 1039952)	Lot 35 DP 572509 (RT 1039953)
	L	Lot 35 DP 572509 (RT 1039953)	Lot 36 DP 572509 (RT 1039954)
	T	Lot 35 DP 572509 (RT 1039953)	Lot 34 DP 572509 (RT 1039952)
	M	Lot 36 DP 572509 (RT 1039954)	Lot 35 DP 572509 (RT 1039953)
	S	Lot 36 DP 572509 (RT 1039954)	Lot 37 DP 572509 (RT 1039955)

	N	Lot 37 DP 572509 (RT 1039955)	Lot 38 DP 572509 (RT 1039956)
	Q	Lot 37 DP 572509 (RT 1039955)	Lot 36 DP 572509 (RT 1039954)
	P	Lot 38 DP 572509 (RT 1039956)	Lot 37 DP 572509 (RT 1039955)
	Z	Lot 38 DP 572509 (RT 1039956)	Lot 39 DP 572509 (RT 1039957)
	W	Lot 39 DP 572509 (RT 1039957)	Lot 38 DP 572509 (RT 1039956)

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule 5 of the Property Law Act 2007

The implied rights and powers are hereby **[varied]** **[negatived]** **[added to]** or **[substituted]** by:

~~[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017]~~

~~[the provisions set out in Annexure Schedule]~~

ANNEXURE SCHEDULE

Continuation of Rights and Powers

- 1.1. Where there is a conflict between the provisions of Schedule Five of the Land Transfer Regulations 2018 (**Regulations**) and Schedule Five of the Property Law Act 2007, the provisions of the Regulations shall prevail.
- 1.2. No power is implied in this easement instrument for the grantor to determine any of the grantee's rights for breach of any provision in this easement instrument (whether express or implied) or for any other cause, it being the intention of the parties that the easements shall subsist for all time unless surrendered.

View Instrument Details



Instrument No 12576700.12
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Easement Instrument



Affected Records of Title	Land District
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039958	Canterbury

Annexure Schedule Contains 5 Pages.

Grantor Certifications

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantor Representative on 26/10/2022 12:17 PM

Grantee Certifications

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Andrew John Kirk as Grantee Representative on 10/10/2022 10:54 AM

*** End of Report ***

Form 22

Easement instrument to grant easement or *profit à prendre*

(Section 109 Land Transfer Act 2017)

Grantor

NTP DEVELOPMENT HOLDINGS LIMITED

Grantee

ENABLE NETWORKS LIMITED

Grant of Easement or *Profit à prendre*

The Grantor, being the registered owner of the burdened land set out in Schedule A, **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s).

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of Easement, or <i>profit</i>	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right to Convey Telecommunications	Area AA on DP 572509	Lot 40 DP 572509 (RT 1039958)	Enable Networks Limited (in gross)
	Area J on DP 572509	Lot 33 DP 572509 (RT 1039951)	
	Area K on DP 572509	Lot 34 DP 572509 (RT 1039952)	
	Area L on DP 572509	Lot 35 DP 572509 (RT 1039953)	
	Area M on DP 572509	Lot 36 DP 572509 (RT 1039954)	
	Area N on DP 572509	Lot 37 DP 572509 (RT 1039955)	
	Area P on DP 572509	Lot 38 DP 572509 (RT 1039956)	

Easements or profits à prendre rights and powers (including terms, covenants, and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule 5 of the Property Law Act 2007.

The implied rights and powers are hereby ~~varied~~ ~~negated~~ [added to] or ~~substituted~~ by:

~~Memorandum number _____, registered under section 209 of the Land Transfer Act 2017,~~

the provisions set out in Annexure Schedule 1.

Annexure Schedule 1

Insert instrument type

Easement

Continue in additional Annexure Schedule, if required

<p>1. Definitions</p> <hr/> <p>1.1 In this Easement Instrument unless the context otherwise requires:</p> <p>Act means the Telecommunications Act 2001.</p> <p>Burdened Land means the land owned by the Grantor and described in Schedule A.</p> <p>Easement means the easement granted in this Easement Instrument.</p> <p>Easement Land means those parts of the Burdened Land marked "J", "K", "L", "M", "N" "P" and "AA" Deposited Plan 572509</p> <p>Grantee means Enable Networks Limited and includes the successors, assigns, servants and agents of the Grantee.</p> <p>Grantor means NTP Development Holdings Limited and includes the successors, assigns, servants and agents of the Grantor.</p> <p>Line has the meaning given to that word in the Act and Lines has the same meaning.</p> <p>Telecommunication has the meaning given to that word in the Act.</p> <p>Works has the meaning given to that word in the Act.</p> <p>2. Grants</p> <hr/> <p>2.1 The Grantor grants to the Grantee the full free right, liberty and licence for all time from the date of registration of this Easement Instrument for the Grantee, its engineers, surveyors, servants, agents, employees, contractors and invitees from time to time and at all times:</p> <p>2.1.1 to lay and maintain a Line or Lines in, over and under the soil of the Easement Land and to use such Line or Lines for the purposes of Telecommunication without interruption or impediment; and</p> <p>2.1.2 subject to clause 3.3, to enter upon the Burdened Land with or without vehicles and with or without materials, machinery and implements and to remain there for the purposes of laying, maintaining, inspecting, repairing, renewing, replacing, upgrading or altering any Line or Lines and to open up the soil for the Easement Land and to make any cuttings, fillings, grades, batters or trenches and to reopen the same and generally to do and perform such acts or things upon the Easement Land as may be necessary to enable the Grantee to receive the full free use and enjoyment of the rights and privileges granted under this instrument;</p> <p>on the terms and conditions set out in this Easement Instrument.</p>
--

3. **Grantee's Rights and Obligations**

- 3.1 This Easement is not in substitution for, and is without prejudice to, such statutory rights and authorities as the Grantee may have from time to time in respect of the Burdened Land.
- 3.2 The ownership of all Lines and Works installed in, over or under the Burdened Land from time to time by the Grantee shall at all times remain vested in the Grantee and no person shall have any estate or interest in such Lines or Works by reason only of having an interest or an estate in the Burdened Land.
- 3.3 The Grantee will on each occasion give the Grantor reasonable prior notice of its intention to enter on the Burdened Land for the purposes described in clause 2.1 provided that in the event of an emergency the Grantee may enter the Easement Land without notice to the extent necessary to deal with the emergency.

4. **Grantor's Obligations**

- 4.1 The Grantor will not without the Grantee's written permission:
- 4.1.1 erect or permit to be erected any improvements on the Easement Land including buildings and fences;
 - 4.1.2 grow or permit to be grown any vegetation (including trees and shrubs) on the Easement Land;
 - 4.1.3 excavate or deposit material on the Easement Land; or
 - 4.1.4 grant any easement, right or interest in the Easement Land to any third party,
- if such actions will or may interfere with, impede, restrict or adversely affect the rights of the Grantee under this Easement Instrument or the efficient operation of its Works or endanger the continuity or safety of the supply of Telecommunications.

5. **Surrender**

The Grantee shall be entitled to surrender the Easement at any time by giving to the Grantor three months' notice in writing to that effect and forthwith upon receipt of such notice the Grantor shall join with the Grantee in executing and registering a surrender of the Easement evidenced by the Easement Instrument.

6. **Miscellaneous**

- 6.1 Where there is a conflict between the provisions of the Fifth Schedule to the Land Transfer Regulations 2018 and the modifications in this Easement Instrument, the modifications prevail. The rule of construction known as the contra proferentem rule does not apply to this Easement Instrument.
- 6.2 The Grantee may assign, transfer, lease or licence all or any part of its rights under this Easement Instrument without requiring the consent of the Grantor.
- 6.3 There is no power in this Easement Instrument for the Grantor to terminate any of the Grantee's rights due to the Grantee breaching any term of this Easement Instrument or for any other reason.
- 6.4 Clause 14(c) of the Fifth Schedule of the Land Transfer Regulations 2018 is amended by

deleting the reference to 14 working days and replacing it with 60 days.

7. Default Provisions

7.1 Without prejudice to any other liability the Grantor may have to the Grantee, if there is any breach or non-observance on the part of the Grantor of any provision of this Easement Instrument, the Grantor will:

7.1.1 cure the breach or non-observance complained of by the Grantee; and

7.1.2 if demanded by the Grantee, pay liquidated damages to the Grantee in the sum of \$250.00 per day for every day that such breach or non-observance continues after the date upon which written demand to cure the breach or non-observance has been given.

8. Arbitration

8.1 Without prejudice to the rights of the Grantee under clause 7, if any dispute arises concerning this Easement, the parties to the dispute will enter into negotiations in good faith to resolve that dispute.

8.2 If the dispute is not resolved within 20 working days from the date on which the parties begin their negotiations the parties will submit to the arbitration of an independent arbitrator appointed jointly by the parties. If the parties agree, the person appointed may act as an expert and not as an arbitrator.

8.3 If the appointment of a single arbitrator cannot be agreed upon within a further period of 10 working days an independent arbitrator will be appointed by the President for the time being of the New Zealand Law Society or his/her nominee on the application of either party.

8.4 The arbitrator will determine the dispute in accordance with the provisions of the Arbitration Act 1996 (and its amendments) or any enactment passed in substitution.

View Instrument Details



Instrument No 12576700.13
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Easement Instrument



Affected Records of Title	Land District
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury

Annexure Schedule Contains 7 Pages.

Grantor Certifications

- I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Liam Ross Glubb as Grantor Representative on 26/10/2022 04:44 PM

Grantee Certifications

- I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply
- I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Fiona Maire Keall Henderson as Grantee Representative on 20/10/2022 02:12 PM

*** End of Report ***

Form 22

Easement instrument to grant easement or profit à prendre

(Section 109 Land Transfer Act 2017)

Grantor

NTP DEVELOPMENT HOLDINGS LIMITED

Grantee

CHRISTCHURCH CITY COUNCIL

Grant of Easement or Profit à prendre

The Grantor being the registered owner of the burdened land(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or profit(s) à prendre set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A

Continue in additional Annexure Schedule, if required

Purpose of easement or profit	Shown (plan reference) DP 572509	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right to drain water	J	Lot 33 DP 572509 (1039951)	In gross
	K, U	Lot 34 DP 572509 (1039952)	In gross
	T, L	Lot 35 DP 572509 (1039953)	In gross
	M, S	Lot 36 DP 572509 (1039954)	In gross
	Q, N	Lot 37 DP 572509 (1039955)	In gross
	P, Z	Lot 38 DP 572509 (1039956)	In gross
	W	Lot 39 DP 572509 (1039957)	In gross

Form 22 – continued

Page 2 of 7

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [**varied**] [~~negated~~] [~~added to~~] or [**substituted**] by:

[Memorandum number _____, registered under section 209 of the Land Transfer Act 2017]

[the provisions set out in Annexure Schedule 2]

Form L

Annexure Schedule 2

insert instrument type

Easement

Continue in additional Annexure Schedule, if required

ANNEXURE SCHEDULE 2

Right to drain water in gross

1. Interpretation

1.1 In this Easement Instrument unless the context otherwise requires:

Utilities means any structure, pole or other appurtenant structure for the provision of utilities or services supplied to or used on the land including but not limited to electricity, gas, telephone, storm water, sewage and water.

Easement Facility in relation to a right to drain water, means pipes, conduits, open drains, pumps, tanks (with or without headwalls), manholes, valves, surface boxes, other equipment suitable for that purpose (whether above or under the ground), and anything in replacement or substitution.

Easement Area has the meaning given to it in Schedule 5 of the Land Transfer Regulations 2018.

1.2 In the interpretation of this Easement Instrument:

- (a) words importing the singular or plural number shall be deemed to include the plural and singular number respectively;
(b) the headings appearing are inserted only as a matter of convenience and in no way define, limit or describe the scope or intent of the clauses of this Easement Instrument nor in any way affect this Easement Instrument;
(c) references to any party include that party's executors, administrators, and assigns, or being a company, its successors and assigns;
(d) all covenants on the part of the Grantor shall be deemed to be covenants by each of the registered owners included in the term "Grantor" and shall jointly and severally bind each of the registered owners and their respective executors, administrators, successors and assigns.

2. Grant of rights, powers, and privileges

2.1 The Grantee (to the exclusion of the Grantor and any other party) shall have the full free uninterrupted and unrestricted right liberty and licence at all times hereafter:

- (a) to drain water (whether sourced from rain, springs, soakage, or seepage) in a free and unimpeded flow (except during any periods of necessary cleaning and repairing) and in any quantity through the Easement Facility and over the Easement Area;
(b) to lay, make, construct, maintain, alter or repair the Easement Facility as the Grantee shall from time to time think fit.

Form L

Annexure Schedule 2

Insert instrument type

Easement

Continuation of Annexure Schedule 2

- 2.2 The Easement Facility referred to in 2.1(a) and (b) is the Easement Facility laid or to be laid along the Easement Area marked J, K, U, T, L, M, S, Q, N, P, Z and W on Deposited Plan 572509.
- 2.3 No power is implied in respect of any easement for the Grantor to determine the easement for breach of any provision of this Easement Instrument (whether express or implied) or for any other cause, it being the intention of the parties that the easement shall subsist until it is surrendered in writing.
- 3. **Grantee's rights**
 - 3.1 For the purpose of performing any duty or in the exercise of any rights implied in this Easement Instrument the Grantee may:
 - (a) enter upon the burdened land by the most practicable route from the nearest public street across any part of the burdened land;
 - (b) remain on the burdened land for a reasonable time for the purposes of completing any work;
 - (c) bring on to the burdened land such materials, tools, equipment, machinery, vehicles or other things as may be necessary for the purposes of completing the necessary work;
 - (d) leave any vehicle or equipment on the burdened land for a reasonable time if work is proceeding;
 - (e) sink and make trenches and shafts on the Easement Area;
 - (f) excavate any clay, gravel, shingle, stones, and earth from the Easement Area;
 - (g) inspect, maintain, cleanse, repair, extend, remove, enlarge or replace the Easement Facility;
 - (h) generally do and perform such acts and things in or upon the Easement Area as may be necessary or proper for or in relation to any of the purposes of this easement.
- 4. **Grantor's obligations**
 - 4.1 The Grantor will not:
 - (a) plant trees upon or permit any tree roots to grow within the Easement Area unless expressly consented to in writing by the Grantee, such consent to be at the sole discretion of the Grantee;
 - (b) build over or erect any buildings or other improvements upon, or permit any Utilities to be located within, the Easement Area unless the siting, erection or location of such building or other improvements or Utilities is expressly consented to in writing by the Grantee, such consent to be at the sole discretion of the Grantee;
 - (c) do or permit or suffer to be done anything which may in any way injure or damage the Easement Facility or interfere with the free flow and passage of any

Form L

Annexure Schedule 2

Insert instrument type

Easement

Continuation of Annexure Schedule 2

matter through the Easement Facility. If the Grantor is in breach of this obligation the Grantor shall promptly at the Grantor's expense properly and substantially repair and make good all such injury or damage and restore such free flow and passage. If the Grantor fails to promptly comply with this obligation then the Grantee may perform the obligation and recover any costs incurred from the Grantor.

5. Grantee's obligations

5.1 The Grantee shall at its own cost:

- (a) install (except where the creation of this easement is part of a subdivision in which case the Grantor will install the Easement Facility at its own cost), maintain and cleanse the Easement Facility so that it is not or does not become a nuisance or annoyance to the Grantor;
(b) remove and carry away all surplus clay, gravel, shingle, stones and earth which may be excavated from the Easement Area;
(c) upon the Grantee disturbing the surface of the Easement Area for any reason, without delay restore the same as nearly as possible to its original condition PROVIDED THAT if any building, improvements, or Utilities are erected or located within the Easement Area without the written consent of the Grantee as required by clause 4.1(b) of this instrument, then the Grantee shall not be required to restore any such building, improvements, or Utilities;
(d) repair and make good any damage which may be done to any fence building or improvement, or to any part of the burdened land, in the exercise by the Grantee of any of the rights granted by this Easement Instrument but the Grantee shall not be responsible for the cost of removing or damaging any fence building improvements or trees upon, or any tree roots growing within, the Easement Area as prohibited under clause 4.1(a).

6. Easement facility to be property of Grantee

6.1 The Easement Facility and any other structures, plant or equipment erected or installed by the Grantee on the Easement Area or any other structures, plant or equipment required to vest in the Grantee pursuant to a condition of a subdivision consent shall be the property of the Grantee.

7. Limitation of liability

7.1 Any right of action which shall at any time accrue to the Grantee by reason of breach or non-observance by the Grantor of any of the covenants contained in this Easement Instrument may be enforced by the Grantee only against:

- (a) the registered owner for the time being of that part of the Easement Area in respect of which such breach or non-observance shall occur; and
(b) the registered owner at the time of such occurrence,

Form L**Annexure Schedule 2**

Page 6 of 7

Insert instrument type

Easement

Continuation of Annexure Schedule 2

to the intent that the liability of any registered owner of the Easement Area shall cease (except as to any breach or non-observance occurring during the period of ownership of that registered owner) upon registration of a transfer of ownership.

8. Default

8.1 If the Grantor or the Grantee does not meet the obligations implied or specified in any easement:

- (a) the party not in default may serve on the defaulting party written notice requiring the defaulting party to meet a specific obligation and stating that, after the expiration of seven working days from service of the notice of default, the other party may meet the obligation;
- (b) if, at the expiry of the seven working day period, the party in default has not met the obligation, the other party may:
 - (i) meet the obligation; and
 - (ii) for that purpose, enter the burdened land.
- (c) the party in default is liable to pay the other party the cost of preparing and serving the default notice and the costs incurred in meeting the obligation;
- (d) the other party may recover from the party in default, as a liquidated debt, any money payable under this clause.

9. Arbitration

9.1 If any dispute arises between the parties relating to this Easement Instrument, that dispute shall be determined by a single arbitrator should the parties agree upon one, or failing agreement, by a single arbitrator to be appointed by the President for the time being of the New Zealand Law Society, in accordance with the Arbitration Act 1996 or any statute enacted in substitution of that Act and for the time being in force.

10. General provisions

10.1 Nothing contained or implied in this Easement Instrument shall be construed so as:

- (a) to compel the Grantee to exercise all or any of the rights granted by this Easement Instrument at any time and the Grantee may commence, discontinue or resume the exercise of all or any such rights at will;
- (b) to abrogate, limit, restrict or abridge any of the rights, powers or remedies vested in the Grantee by statute.

10.2 The Grantor shall pay the Grantee's reasonable costs of the preparation, registration, variation and any surrender of this Easement Instrument including the staff processing costs and/or the legal costs incurred by the Grantee in relation to preparation, registration, variation and surrender of this Easement Instrument.

10.3 The following provisions are applicable to the easement granted by this Easement Instrument:

Form L

Annexure Schedule 2

insert instrument type

Easement

Continuation of Annexure Schedule 2

- (a) the rights, powers and privileges conferred on the Grantee by this Easement Instrument are in substitution for the definition of "Easement Facility" and the rights and powers set out in clauses 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 of Schedule 5 of the Land Transfer Regulations 2018 but the remaining provisions of the Land Transfer Regulations 2018 shall apply to this Easement Instrument;
- (b) where there is a conflict between the provision of the Fifth Schedule of the Property Law Act 2007 and the Fifth Schedule of the Land Transfer Regulations 2018, the provisions of the Fifth Schedule of the Property Law Act 2007 will prevail;
- (c) where there is a conflict between the provisions of the Fifth Schedule of the Land Transfer Regulations 2018 or the Fifth Schedule of the Property Law Act 2007 and the provisions of this Easement Instrument, the provisions of this Easement Instrument will prevail.

View Instrument Details



Instrument No 12576700.14
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Records of Title	Land District
1039948	Canterbury
1039949	Canterbury
1039950	Canterbury
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury
1039958	Canterbury
1039966	Canterbury
1039967	Canterbury

Annexure Schedule Contains 2 Pages.

Signature

Signed by Liam Ross Glubb as Territorial Authority Representative on 26/10/2022 12:17 PM

***** End of Report *****



IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF DP 572509 and Subdivision Consent RMA/2022/163

CONSENT NOTICE PURSUANT TO SECTION 221, RESOURCE MANAGEMENT ACT 1991

To: The Registrar-General of Land
Canterbury Land Registration District
LAND INFORMATION NEW ZEALAND

TAKE NOTICE that the land described below is subject to conditions in relation to a subdivision consent as follows:

Sewer - Lots 1, 31 to 40, 52 and 53

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Stormwater - Lots 1, 31 to 40, 52 and 53

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

AND THAT you are hereby directed and required to register the same pursuant to Section 221 Resource Management Act 1991.

DESCRIPTION OF LAND AFFECTED

ALL THOSE parcels of land comprising:

- Lot 1 DP 572509 comprised in Record of Title 1039948
- Lot 31 DP 572509 comprised in Record of Title 1039949
- Lot 32 DP 572509 comprised in Record of Title 1039950
- Lot 33 DP 572509 comprised in Record of Title 1039951
- Lot 34 DP 572509 comprised in Record of Title 1039952
- Lot 35 DP 572509 comprised in Record of Title 1039953
- Lot 36 DP 572509 comprised in Record of Title 1039954



- Lot 37 DP 572509 comprised in Record of Title 1039955
- Lot 38 DP 572509 comprised in Record of Title 1039956
- Lot 39 DP 572509 comprised in Record of Title 1039957
- Lot 40 DP 572509 comprised in Record of Title 1039958
- Lot 52 DP 572509 comprised in Record of Title 1039966
- Lot 53 DP 572509 comprised in Record of Title 1039967

DATED this 5th day of October 2022

SIGNED for and on behalf of
CHRISTCHURCH CITY COUNCIL

A handwritten signature in black ink, appearing to read "M. Regnault".

Marilyn Regnault

Principal Advisor Resource Consents

Authorised Officer (for the purposes of Section 221 Resource Management Act 1991)

View Instrument Details



Instrument No 12576700.16
Status Registered
Date & Time Lodged 25 January 2023 16:59
Lodged By Rushton, Brooke Renee
Instrument Type Consent Notice under s221(4)(a) Resource Management Act 1991



Affected Records of Title	Land District
1039949	Canterbury
1039950	Canterbury
1039951	Canterbury
1039952	Canterbury
1039953	Canterbury
1039954	Canterbury
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury
1039958	Canterbury

Annexure Schedule Contains 2 Pages.

Signature

Signed by Liam Ross Glubb as Territorial Authority Representative on 26/10/2022 12:17 PM

***** End of Report *****



IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF DP 572509 and Subdivision Consent RMA/2022/163

CONSENT NOTICE PURSUANT TO SECTION 221, RESOURCE MANAGEMENT ACT 1991

To: The Registrar-General of Land
Canterbury Land Registration District
LAND INFORMATION NEW ZEALAND

TAKE NOTICE that the land described below is subject to conditions in relation to a subdivision consent as follows:

Electricity Transmission Lots 31 to 40

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

AND THAT you are hereby directed and required to register the same pursuant to Section 221 Resource Management Act 1991.

DESCRIPTION OF LAND AFFECTED

ALL THOSE parcels of land comprising:

- Lot 31 DP 572509 comprised in Record of Title 1039949
- Lot 32 DP 572509 comprised in Record of Title 1039950
- Lot 33 DP 572509 comprised in Record of Title 1039951
- Lot 34 DP 572509 comprised in Record of Title 1039952
- Lot 35 DP 572509 comprised in Record of Title 1039953
- Lot 36 DP 572509 comprised in Record of Title 1039954
- Lot 37 DP 572509 comprised in Record of Title 1039955
- Lot 38 DP 572509 comprised in Record of Title 1039956
- Lot 39 DP 572509 comprised in Record of Title 1039957
- Lot 40 DP 572509 comprised in Record of Title 1039958

DATED this 5th day of October 2022

SIGNED for and on behalf of
CHRISTCHURCH CITY COUNCIL



Marilyn Regnault

Principal Advisor Resource Consents

Authorised Officer (for the purposes of Section 221 Resource Management Act 1991)



View Instrument Details

Instrument Type	Caveat against dealings with land under Section 138 Land Transfer Act 2017
Instrument No	12762909.1
Status	Registered
Date & Time Lodged	21 June 2023 16:57
Lodged By	Rollason, Marie Jean

Affected Records of Title	Land District
1039955	Canterbury
1039956	Canterbury
1039957	Canterbury

Registered Owner

NTP Development Holdings Limited

Caveator

Pioneer Energy Limited

Estate or Interest claimed

Pursuant to an Agreement for Sale and Purchase dated 23 May 2023 in respect of the above land made between the Caveator as purchaser and Balar Prop Co Limited as vendor, where Balar Prop Co Limited is the purchaser under an Agreement for Sale and Purchase dated 28 May 2021 in respect of the above land under which NTP Development Holdings Limited as the registered owner is the vendor.

Notice

Take notice that the Caveator forbids the registration of any instrument, or the recording of any matter in the register that transfers, charges, or prejudicially affects the estate or interest protected by this caveat until this caveat is withdrawn by the Caveator, removed by order of the High Court, or until the same has lapsed under the provisions of section 143 of the Land Transfer Act 2017.

Address for Service of Caveator

Pioneer Energy Limited

C/- Buddle Findlay Solicitors, Mark Odlin

mark.odlin@buddlefindlay.com

Address for Registered Owner

NTP Development Holdings Limited

C/- Saunders & Co Lawyers, Liam Glubb

liam.glubb@saunders.co.nz

Caveator Certifications

I certify that I have the authority to act for the Caveator and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument



View Instrument Details

Caveator Certifications

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

Signature

Signed by Scott James Holdaway as Caveator Representative on 20/06/2023 11:38 AM

***** End of Report *****

Report / Decision on a Non-notified Subdivision Consent Application

Sections 95A / 95B and 104 and 104C

Application Number:	RMA/2022/163
Applicant:	Ngai Tahu Development Holdings Limited
Site address:	320 Shands Road and 637 Main South Road
Legal Description:	Lots 1-3 LT 549428, Lot 2 DP 397987 and Lot 9 DP 343592
Zoning:	Industrial Heavy
Overlays and map notations:	Christchurch International Airport Protection Surfaces overlay, 33kV Electricity Lines, 66kV Electricity Distribution Lines, 220kV National Grid
Activity Status - subdivision:	Restricted Discretionary
Activity Status - land use:	Restricted Discretionary
Activity Status - NESCS:	Restricted Discretionary
Description of Application:	42 lot fee simple subdivision and associated earthworks.

New Application to allow for reassessment of Development Contributions

Subdivision consent RMA/2020/1200 was granted on 21st December 2020 for this development, however due to a reduction in Development Contributions under the Development Contributions Policy 2021 the applicant is seeking reassessment by way of lodging this application. The application is not materially different to that considered under the original consent, and subsequent variations to that consent (RMA/2020/1200 A to C).

The proposal

This application is to undertake a 42 lot stage industrial subdivision with associated earthworks, roading, infrastructure and utility reserves.

The key elements of the subdivision proposal are described below:

Subdivision:

- This subdivision proposal is to create 42 industrial lots and a 20 ha balance land (Lot 51). Minimum lot sizes ranges from 1752m² to 4ha;
- The subdivision is to occur in two stages;
- Six lots for kiosks are proposed;
- Six allotments are proposed to be vested as roads;
- Proposed collector road Lot 66 will be connecting to Quadrant Drive in this application. A cost share agreement between the applicant and neighbouring property Calder Stewart has been established to create this connection.
- Ten allotments are proposed for Local Purpose (Utility) Reserves;
- Most of the allotments will have access to roads within the proposed subdivision layout;
- An easement in gross for draining water is proposed within the Lot 33;
- Lot 28 is proposed to have onsite stormwater treatment for all hardstand areas. The remainder of the site will be disposing stormwater in an integrated manner and into Council's network;
- The site contains electricity distribution and national grid transmission lines

Earthworks and NES consent:

- The site was found to be contaminated and classified as G3 landfill sites, G5 waste disposal to land, B2 electrical transformers, B4 power stations, A10 pesticide bulk storage, I release of hazardous substances. Known contaminants include Arsenic, heavy metals, PAH, SVOCs, and asbestos. As such, the subdivision requires resource consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES). This concerning the subdivision component as well as disturbing land for earthwork purposes.

- The proposed subdivision will result in bulk earthworks of a maximum cut of 195,000m³ and a maximum fill of 95,000m³.

In regard to the application, I note the following:

- The application site is located within the South West Hornby Outline Development Plan (ODP);
- Regional consent for construction phase stormwater is required to be obtained; and
- The application site has been recently granted an earthworks consent (RMA/2019/2581) to realign irrigation piping. The effects were considered to be less than minor and erosion and sediment control conditions were imposed.

A site visit was undertaken (from the road/footpath) on the 18th August 2020 under the previous resource consent RMA/2020/1200.

Description of site and existing environment

The application site and surrounding environment are described in section 2 of the AEE submitted with the application.

Relevant rules and activity status

Christchurch District Plan

The site is zoned Industrial Heavy.

Land use rules

The proposal requires land use consent for a restricted discretionary activity under the following rule(s):

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
8.9.2.3 RD1	8.9.2.1 P1 a. Earthworks volume and depth b. Depth of earthworks c. Earthworks gradient	The proposed earthworks will exceed the 1000m ³ maximum volume in Table 9) – 290,000m ³ is proposed. The proposed earthworks will exceed the 0.6m maximum depth by 4.5m.	8.9.4 Matters for discretion: 8.9.4.1 - Nuisance 8.9.4.2 - Resources and assets (versatile soils) 8.9.4.3 - Land stability 8.9.4.6 - Amenity	8.9.1 a. - Must not be publicly notified
16.5.4.1.3 RD3	n/a	Any development within the area shown as 'rural wastewater irrigation area' on the outline development plan in Appendix 16.8.8 is classified as Restricted Discretionary Activity until: i. The full southern spine road between Main South Road and Shands Road (Marked as 'C' on the outline development plan) has been constructed and is open to the public; ii. B. Capacity upgrades have commenced at the following intersections: A. Intersection of the southern spine road and	16.7.3.9.4 – Roading and access	Any application arising from this rule shall not be publicly notified.

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>Shands Road (marked as 'A' on outline development plan in Appendix 16.8.8)</p> <p>B. Intersection of the northern spine road and Shands Road (marked as 'B' on outline development plan in Appendix 16.8.8).</p> <p>The application is proposing development (industrial activities after the completion of the subdivision) prior to the full southern spine (to the extent shown in the ODP).</p>		

Subdivision rules

The proposal requires subdivision consent for a restricted discretionary activity under the following rule(s):

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
8.5.1.2 C4	n/a	The subdivision to create allotments for access, utilities, roads and reserves is classified as a controlled activity.	8.7.3	8.4.1.1
8.5.1.3 RD2	8.6.10 South West Hornby Area Outline Development Plan.	<p>Any subdivision within the area shown as "rural wastewater irrigation area" on the outline development plan at Chapter 16 Appendix 16.8.8. for the Industrial Heavy Zone (South West Hornby) shall not occur until the following works have been undertaken:</p> <p>i. The construction and opening for traffic of the full southern spine road between Main South Road and Shands Road (marked as 'C') on the outline development plan; and</p> <p>ii. the commencement of the physical construction works for capacity upgrades at both the following intersections –</p> <p>A. the intersection of the southern spine road and Shands Road (marked as 'A' on the outline development plan); and</p> <p>B. the intersection of the northern spine road and</p>	8.7.4, 8.7.5 and 8.8.3	8.4.1.1

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>Shands Road (marked as 'B' on the outline development plan).</p> <p>The proposal does not comply with 8.6.10(a)(i) as the construction of Road C has not yet been open to traffic at the time of applying for consent and upgrades to Intersection B has not yet commenced. Therefore, this activity is a restricted discretionary activity¹.</p>		
8.5.1.3 RD2	8.6.8 Wastewater disposal	The proposed wastewater disposal does not comply as no wastewater capacity certificate was provided in the application.	8.7.4 - General matters 8.8.6 - Servicing	8.4.1.1
8.5.1.3 RD5	n/a	<p>Any subdivision within the corridor 37 metres of the centre line of a 220kV National grid transmission line is classified as a Restricted Discretionary Activity.</p> <p>The application site has national grid transmission lines located within the site.</p>	8.7.4 and 8.8.6.i	8.4.1.1.
8.5.1.3 RD6	n/a	<p>Any subdivision within 32 metres of the centreline of a 66kV electricity distribution line and 24 metres of the centreline of a 33kV electricity distribution line is classified as a Restricted Discretionary Activity.</p> <p>The application site has these distribution lines located within the site.</p>	8.7.4 and 8.8.6.8i	8.4.1.1.

Rule 8.4.1.1 specifies that any application for a controlled or restricted discretionary subdivision consent shall not be publicly or limited notified (except in relation to restricted discretionary applications seeking access on to a State Highway). This provision does not apply as the application contains land use non-compliances which do not have any restrictions on the notification decision.

National Environmental Standard

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) controls subdivision of land and soil disturbance where an activity on the Hazardous Activities and Industries List (HAIL) is being carried out or is more likely than not to have been carried out.

In this case it is more likely than not that a HAIL activity is being or has been undertaken on the site. The applicant has submitted a detailed site investigation (DSI) stating that the soil contamination exceeds the applicable standard. Pursuant to Regulation 10(2) a restricted discretionary activity resource consent is required, with Council reserving discretion over the adequacy of the detailed site investigation, the suitability of the land for the activity, the approach to remediation, the adequacy of the site management plan, the transport,

¹ The relevant rules in the ODP state that development must not occur on this site until Intersections A and B have been upgraded. It is have noted that intersection A has been upgraded, however intersection B has not.

disposal and tracking of soil, the requirements for and conditions of a financial bond, the timing and nature of review conditions and the duration of the consent.

Effects on the environment and adversely affected persons [Sections 95D, 95E and 104(1)(a)]

Subdivision

As a restricted discretionary activity the assessment of the effects of the subdivision is limited to the matters over which the Council has limited its discretion outlined in Chapter 8 of the Christchurch District Plan.

In my opinion the effects of this proposal relate to subdivision design, servicing, road design and modelling, network utilities and reserve sensitivity, earthworks and health of the land.

Subdivision design

The relevant matters of discretion for the subdivision application are listed in Rules 8.7.3 and 8.7.4. The matters of discretion assess the design of the subdivision including but not limited to;

- Roading and accesses to proposed allotments and how they correlate with the adjoining transport networks;
- Servicing and infrastructure proposed and whether they are appropriate;
- Open spaces and reserves proposed and whether any natural and cultural values are established/existing on site; and
- Whether the subdivision design accords with the relevant ODP.

I will be discussing this in more detail below.

Subdivision Design and Outline Development Plan

The development creates non-compliances as outlined above which require assessment of Rules 8.7.4, 8.7.5, 8.8.3 and 16.7.3.9.4 in relation to subdivision design and the relevant Outline Development Plan. These non-compliances include developing prior to the spine road being open to the public and intersection upgrades have occurred. Regardless of the non-compliances, there is a broad discretion to consider a wide range of subdivision and ODP matters for any large scale industrial subdivision application.

The application is within the South West Hornby Outline Development which has been outlined earlier in this report. I will further discuss transport effects in my assessment.

In terms of design, I consider that the proposal is broadly consistent with the ODP layout and the matters of discretion. My reasoning is as follows:

- The proposed allotments are of a sufficient size and dimension anticipated for the Industrial Heavy zone;
- The surrounding environment is zoned industrial (either Industrial Heavy or Industrial General Zone) therefore the site design is considered to be compatible with the adjoining subdivision and land use activities;
- The proposed local purpose (utility) reserves have been proposed for stormwater conveyance and they are considered to be sufficiently designed for their purpose;
- The design of the application provides integration and connection within the site as well as to adjoining properties via the proposed collector road and additional local roads;
- The servicing proposed below is not considered to disadvantage adjoining neighbouring properties. I consider that the subdivision does not preclude or discourage development in another part of the outline development plan;
- The application will be complying with the key structural elements indicated within its site (collector road of Quadrant Drive to be extended). The design will also connect with the spine road once this has been constructed (which is detailed further below).

Overall I consider the proposal supports a comprehensive and integrated approach to the development of the South West Hornby Industrial Area.

Stormwater

The applicant is proposing the following for stormwater servicing:

- All future roof stormwater discharges will be via onsite soakage pits which have capacity to detain and discharge all rainfall run off up to and including a 2% AEP critical duration storm. A consent notice is proposed as the design of the roof soakage pits will be the responsibility of individual lot owners and will require approval at the building consent process;

- The development's stormwater network will have capacity to convey a 1 in 5 critical duration rainfall event;
- It is proposed all lots (except Lot 28) and external roading will discharge to one of the two stormwater management areas within the application site (Lots 100 and 101). Lot 100 will contain a swale which provides primary treatment prior to discharging the soakage basin. Lot 101 will contain forebays (as a primary treatment) which will be discharged to the soakage basin. The basins have been designed to treat rainfall runoff generated by first flush and any exceedances will be diverted to the detention basin and discharged via an underlying rapid soakage trench;
- Stage: The basin in Lot 101 will be constructed and vested to Council while Lot 100's basin will be partially constructed and kept in private ownership with an easement in gross. Stage 2 will complete the basins in Lot 100 which will then vest in CCC and the easement in gross will be surrendered;
- It has been assumed that 50% of each lot will contain impervious hardstand and will discharge to the external stormwater network;
- A consent notice is proposed that Lots 1 – 27 and 29 – 40 and 52-53 require their hardstand stormwater to be reticulated to the connection provided;
- All allotments (excluding Lot 28) and proposed roads are to be in accordance with Council's global discharge consent;
- Lot 28 is proposed to have its own onsite treatment for its hardstand and attenuation. Their onsite treatment of hardstand stormwater and attenuation for the 2% AEP critical duration storm;
- The applicant has proposed that a new easement in favour of Council over Lot 33 is established. This is to enable overland flow from adjoining land to continue to cross the site;

The proposed stormwater servicing has been reviewed by Council's stormwater planning engineer Brian Norton. He has commented:

- The basins provide the minimum above ground detention storage required by the Waterways Wetlands and Drainage Guide.
- The basins are considered to be functional however it is recommended that the basins are deepened to soften the edged and widen the berms. The appearance can also be softened by landscaping once constructed.

I accept Mr Norton assessment and recommended conditions. The applicant has accepted these conditions and they form part of the application. I consider the effects of the stormwater servicing to be **less than minor**.

Wastewater

The applicant has not provided a wastewater capacity certificate with the application. The application has been assessed by Council's Team leader for Three Waters Asset Planning Michele McDonald. Ms McDonald does not consider that the servicing of this development will disadvantage other adjoining developments as a result. Ms McDonald has proposed conditions which the applicant has accepted. I adopt Ms McDonald's assessment and recommendations.

I consider the effects on wastewater servicing to be **less than minor**.

Water supply

Specialist input has been obtained from Council's Team leader for Three Waters Asset Planning Michele McDonald. Ms McDonald considers that the proposed water supply servicing would not have a negative impact on adjoining neighbouring sites in regard to further development of the surrounding environment. Ms McDonald has proposed water supply conditions which the applicant has accepted. Overall I consider the effects of servicing (in regard to water supply) are **less than minor**.

Reserves

In regard to open space, the proposed local purpose (utility) have been accepted by Council's Park Team and Three Waters. Council's Open Space Planner Peter Barnes has recommended conditions in regard to the vesting of the reserves, and standard park conditions for green spaces, establishment periods, street trees, final completion and handover. I consider the proposed open spaces to be appropriate.

Transport – Road Design & Modelling

The proposed transport network within the development includes:

- Five internal roads which will be vested to Council. These roads will have a legal width of 21 metres and all roads will facilitate two-way traffic.
- An extension of Quadrant Drive (collector road) which will contain a legal width of 22m and a carriage way of 14m.

The development is being proposed prior to the construction/establishment of the spine road which requires an assessment of the transport networks effects. The applicant has provided a modelling report which assesses the transport network effects created from the proposal. This has been reviewed by Council's Transport Engineers Andy Milne and Weng-Kei Chen who have also assessed the proposed roading design. Mr Milne has provided a memo and updated comments. I have summarised Mr Milne and Mr Chen comments:

- The subdivision and consequent development rely on the establishment of a road connection to the c-spine road and its connection to Shands Road to create a safe and efficient transport network for the locality.
- Due to there being no bus route within close proximity to the site, connections to public transport services will be required to be improved in the near future.
- There are a number of uncertainties in the modelling which include; the true impact of CSM2 on changes in traffic volumes on the surrounding road network, form and timing of the Calder's link and intersection upgrade at Sir James Wattie Drive/ Shands Road, and future route assignment of traffic in the area.
- It has been accepted that a footpath could be created when Lot 40 and 51 are further developed or whether neighbouring site RS 2095 is further developed. The application is proposing to provide a road linkage to RS 2095 which could eventually connect to the Main South Road in the future.
- Connaught Drive/Halswell Road intersection is to be upgraded in the future and once the c-spine road is constructed, any effects on the levels of service will be reduced.
- A shared footpath is required within Lot 102 connecting to Shands Road. This is to provide pedestrian and cycle way connections from Shands Road into the proposed subdivision. This will assist in providing alternative transport options for users of the development.
- A safety audit will be imposed as a condition to be assessed at the engineering design phase. The roading design will be assessed in detail at the engineering design phase.
- Mr Milne and Mr Chen have accepted the applicant's volunteered condition *"No development is permitted on Lots 1 to 40 and 52-53 until such time as the following road connections (legal and physical) are made to the application site:*

i. To Quadrant Drive to the north."

Overall Mr Milne and Mr Chen have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent. I accept and adopt their comments and recommendations. The applicant has adopted these recommendations.

I consider that the roading network proposed is generally appropriate having regard to the District Plan District Plan provisions. I note that the collector road is aligned with the requirements of the ODP. If the C Spine Road was fully developed in the ODP area, it would not materially improve the overall performance of the road network because it would not connect to Main South Road. I consider the effects of the road design and modelling to be **less than minor**.

Other conditions

The matters of control in Rule 8.7.4 cover a wide range of matters required to be addressed to ensure a subdivision proposal is appropriate. Conditions have been proposed for the following items:

- Staging;
- Engineering general conditions and the requirement of engineering plans;
- Street lighting;
- Telecommunications and energy supply;
- Easement conditions;
- Road naming;
- Amalgamations; and
- GST forms to be completed at the s224 certification

These conditions generally ensure that the subdivision is designed and constructed to an appropriate standard and in line with the Infrastructure Design Standard (IDS) and Construction Standard Specifications (CSS). They help to secure the right form of land tenure for industrial titles and public land and assets (such as easements, reserves and amalgamation). Many of these are also administration conditions to ensure processes up to the s224 certification are implemented correctly. The applicant has not raised any concerns in regard to these conditions and they reflect the proposal put forward by them.

Network utilities and reverse sensitivity effects

The application site contains the following electricity transmission lines:

- 220kV National Grid Transmission Lines (will be running through proposed Lots 28, 30, 32, 40, 42-47, 100(Local purpose utility reserves) 63 and 66 (proposed legal road));
- 66kV Electricity Distribution Lines (will be running through proposed Lots 7,8, 16,17 and 101 (Local purpose utility reserve); and
- 33kV Electricity Distribution Lines (to run through proposed Lots 7, 8, 16 and 101)²

Under Rule 8.8.6.i, consultation with Transpower and Orion are required. The relevant matters of discretion to assessed electricity transmission and reverse sensitivity effects are listed below:

- The extent to which the subdivision design mitigates adverse effects, including reverse sensitivity to nearby National Grid or electricity distribution lines shown on the planning maps, Radio New Zealand Limited's Gebbies Pass Road facilities or other strategic infrastructure³;
- Outside the Central City, the extent to which the subdivision design and construction allows for earthworks, buildings and structures to comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).⁴

The applicant has consulted with the two companies and I have summarised their comments below.

Transpower

Transpower have provided the following comments:

"The proposed activity on the local purpose reserves to be vested in Council represents the greatest risks to Transpower in terms of activity on those parcels and future access to the line support towers. Conditions have been proposed to maintain access through these parcels of land. If the consent holder follows the proposed conditions (recommended by Transpower) it enables the reserves to be handed to the Council in a state that preserves access."

Transpower have recommended the conditions in regard to earthworks, mobile plant clearance, and safe separation distances for people working on site, stormwater, proposed vegetation, construction management plan and consent notices. The consent notices proposed are in regard to electrical safe distances, building setbacks and control of vegetation within the transmission line areas. The applicant has accepted these draft conditions proposed by Transpower.

Orion

Orion has provided the following comments regarding their infrastructure:

- The application site has an existing 11kV line through the site. The line is proposed to be installed underground which forms part of the Orion connection agreement to provide power for the subdivision.
- The 66kV electricity distribution line is classified as strategic infrastructure and plays a critical role in providing electricity to Christchurch. There is potential for two new pole support structures to be installed on proposed Lot 16. This will be further discussed at later date with the applicant.
- Orion also owns and operates the existing Shands Road substation (330 Shands Road).
- There is a need for sufficient protection of the distribution lines to ensure the on-going operation, development and maintenance of these lines and their associated support structures.
- The Applicant has volunteered a Consent Notice to apply to Lots 7, 8, 16, 17 and Lot 101 where the 66kV electricity distribution line traverses to require any buildings to be built outside of the required setback;
- The application makes reference to kiosk title sites to be transferred to Orion (proposed lots 70-75 as shown on the Application Plans). Please note final locations of kiosk sites will be determined through the electrical design and connection agreement process.
- For completeness, as part of the standard Orion connection agreement process to provide power for the subdivision Orion will consider the on-going operation, maintenance and access requirements for the existing 66kV electricity distribution line. This will include the registration of an electrical easement in gross in favour of Orion New Zealand Limited for the existing 66kV electricity distribution line over proposed lots 7, 18, 16, 17, 22 and 101. This easement will extend 10 metres out from the centreline of the electricity distribution line and 10 metres from the outer edge of any support structure foundation and subject to Orion's standard terms and conditions.

² The 33kV distribution line is proposed to be relocated underground as a result of this subdivision.

³ Refer to Clause 8.7.4.1.g of the District Plan.

⁴ Refer to Clause 8.7.4.1.q. of the District Plan.

To facilitate the on-going operation, maintenance and access to these lines and their associated support structures, Orion requests that the resource consent is imposed with the following condition and advice notes to reflect the following:

“The detailed design for the new road over proposed Lot 60 and 61 in the vicinity of the existing 66kV electricity distribution lines shall demonstrate compliance with the New Zealand Electrical Code of Practice for Electrical Safe Clearance Distances 34:2001 (NZECP34:2001).

Advice notes:

Vegetation to be planted around the electricity distribution lines shall be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

Any construction works including the operation of mobile machinery in the vicinity of the electricity distribution lines must comply with the NZECP34:2001

The detailed design for the stormwater basin to be constructed on Lot 101 under the existing 66kV electricity distribution lines shall comply with the NZECP34:2001

Subject to the requested condition and advice notes being imposed on the resource consent decision then Orion has no objection to this subdivision proposal. The applicant have accepted the draft conditions and advice notes proposed.

Conclusion

Based on the information provided and the above requested conditions and advice notes being included at the end of this report, Orion and Transpower have no objection to the proposal. With respect to reverse sensitivity effects, I consider that given the position and scale of the existing 66kV and 220kV electricity and transmission lines and their associated support structures any prospective owner or occupier will be well aware of their presence on the site. On the basis of the above I consider any adverse effects with the proposed works and development within proximity to 66kV and 220kV electricity distribution lines to be **less than minor**.

Earthworks effects

The proposed earthworks create an exceedance of earthworks in Chapter 8.9 of the District Plan. I consider the primary effects relate to nuisance, land stability and amenity.

The applicant has provided the following information regarding the proposed works:

- The proposal includes cutting volumes of 195,000m³ and filling volumes of 95,000m³;
- The maximum depths of cut is proposed 4.5 metres below ground level;
- Earthworks are proposed for the formation of carriageways, service installation, site contouring and filling, filling of areas with uncontrolled fill and the formation of two stormwater management areas.
- Earthworks around the power pylon foundations will be limited to a maximum depth of 250mm within 0-6m from the pylon foundations and a maximum depth of 1.1m within 6-12m of pylon foundations.
- Roads will be cut below the existing ground level and there will be 1 in 7 batter from the road boundary up to the existing ground level inside the Lots. Within the vicinity of the Stage 1 (Lot 101) the sections will be filled so they grade at a minimum slope of 1 in 500 towards the road.
- The existing open drain along the back of Lots 33 to 38 will be cleaned out and infilled. Lot 29 will also be cleared and graded.
- The finished surface of each allotment not requiring filling will be contoured to the level of the road boundary and increased in height to the rear of each site at a minimum grade of 1 in 500, this will ensure site drainage towards carriageways and associated stormwater conveyance infrastructure.
- The sites will be graded to enable allotments to achieve a minimum of 1 in 500 grade towards the road at some point across each lot. In Stage 2, Lots 33 – 39, earthworks are proposed to be kept to a minimum, to work with the topography, while still allowing sites to achieve stormwater flow from the site to enter the swale at Lots 42-47 on their downhill (eastern side).

The proposed works have the potential to create nuisance effects which include dust, sedimentation, erosion, change of drainage patterns, effects on groundwater and surface water in which could affect neighbouring properties, roading networks, waterways and the wider environment. It can also result in land stability issues which further exacerbate these nuisances. I consider that most nuisance effects can be controlled via conditions. The proposed conditions have been accepted by the applicant. Amenity effects are less than minor as the releveling of site provides suitable land for development and will not affect neighbouring properties.

Specialist input has been obtained from Senior Subdivision Engineer Yvonne McDonald. She has made the following comments:

“Earthworks are 195 000m³ cut and 95 000m³ fill, to a maximum cut depth of 4.5m below ground level. The applicant estimates 15 000 m³ of earthworks are needed to address the contaminated material, which will be managed through a Remedial Action Plan. I suggest the conditions from NES be read in conjunction with mine, to avoid double ups and conflicts. I am happy if they are combined. The applicant states earthworks around the power pylons will be restricted in depth and setbacks observed.

These earthworks are to reshape lots, construct roading, install services and create stormwater basins and will be carried out in stages, which the applicant states will help reduce potential erosion, sediment and dust discharges. An Erosion and Sediment Control Plan (ESP) will be provided for acceptance and applied to the works to manage these discharges. I have suggested normal conditions requiring provision of this plan for acceptance before works commence.

Existing and design ground levels have only been provided for stage 1. Lots 33-38 are shown with fill on the southeast corners. The land falls away from this boundary so cross-boundary overland flows shouldn't be affected by this. I have suggested conditions about fill retention, preserving fences and preventing drainage effects downstream.

Filling in lots of up to 1.0m depth on the Shands Rd boundary will require battering to the existing ground level. Currently the land is at or above the legal road so the drainage patterns are not changing significantly. I have suggested a condition that all batters be within the applicants property.

The applicant states historic uncontrolled fill is present in an old alluvial channel and that this and test pits will be re-excavated and compacted to comply with NZS 4431. The applicant has suggested a condition to ensure this. Filling to the existing drain on the south boundary will also be placed in a controlled manner. I have suggested normal fill placement and recording conditions to support this.

Under the geotechnical assessment, it was noted that the channel to the west will require an outfall through the development to preserve overland flow and the applicant has suggested a condition to ensure this. I agree with their proposed condition.

The applicant states a consent for construction phase stormwater will be applied for at a later stage.”

I adopt Ms McDonald's assessment and consider the earthwork effects are **less than minor**.

Health of the land

The application site has been identified as HAIL site including the activities:

- E1 – Asbestos products manufacture or disposal
- G5 – Waste disposal to land

A Detailed Site Investigations (DSI) have been undertaken for the Applicant Eliot Sinclair in 2018 and further investigations in 2020. The reports and soil testing results confirm that contaminants such as asbestos, located within areas of the site are above industrial guideline standards.

A remedial action plan is proposed as a consent condition. Site Validation reporting will also be required to confirm remedial measures have been satisfactorily undertaken as and where relevant.

Specialist input has been obtained from Council's Senior Environmental Health Officer Isobel Stout. Ms Stout has made the following comments:

“This is the problematic land with the vegetable processing water discharge system. It seems it's distributed more than just water. The number of investigations looks to be up to 4 now and all of them have found asbestos fibres at levels above land use standards in soils in relation to the discharge points. The subdivision is therefore restricted discretionary.

At this stage there is no RAP as the staging timetable and actual method of remediation is still unconfirmed. We are being asked to consent the submission of an RAP stage by stage and I am OK with approach. Ultimately the work will have to be done prior to S224 in any case.”

Ms Stout has recommended the following condition:

“A Remedial Action Plan (RAP) shall be prepared by a suitably qualified and experienced practitioner in the assessment and management of contaminated land. The RAP shall be prepared in general accordance with Contaminated Land Management Guidelines, No.1, Ministry for the Environment (revised 2011), and shall

include (but not be limited to) a detailed discussion of the remedial options available and the extent of remedial works required, the methods of validation and the necessary pre-remediation site management procedures (e.g. fencing, warning signs, stormwater diversion, etc), that will avoid, mitigate, or remedy any adverse effects of the remedial works on human health.

At least 10 working days prior to the commencement of the remedial works, the RAP shall be submitted to Council for review and certification that it is within the scope of this consent and it meets the conditions of this consent."

I consider that site validation condition is also required to ensure that the site is appropriate for industrial land use prior to s224 certification being issued. I consider that the effects of contamination are limited to the site and if remedied as proposed by conditions have **less than minor effects**.

Conclusion

The proposed subdivision is generally anticipated within the zone, and I consider that any adverse effects on the environment can be adequately mitigated by the recommended conditions of consent.

The effects of these non-compliances are less than minor and there are no affected parties.

Notification assessment [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notified or limited notification of an application is required.

Public notification

- Step 1. The application does not meet any of the criteria for mandatory notification in section 95A(2).
- Step 2. The application does not meet any of the criteria in section 95(A)(5) precluding public notification. Although Rule 8.4.1.1 a. precludes public notification of the subdivision consent there is no such rule for the land use activity.
- Step 3. There are no rules or NES requiring public notification, and any adverse effects on the environment will be no more than minor (section 95A(8)).
- Step 4. There are no special circumstances that warrant public notification (section 95A(9)).

Limited notification assessment

- Step 1. There are no affected groups or persons as outlined in section 95B(2) and (3).
- Step 2. The application does not meet any of the criteria in section 95B(6) precluding limited notification, as there are no rules precluding it and the application is not for a controlled activity land use consent.
- Step 3. As discussed above, no persons are considered to be affected under section 95E (sections 95B(7) and (8)).
- Step 4. There are no special circumstances that warrant notification to any other persons (section 95B(10)).

Conclusion on notification

There is no requirement for public or limited notification of either the subdivision or land use aspect of this application.

Relevant objectives, policies, rules and other provisions of the District Plan [Section 104(1)(b)(vi)]

Regard must be had to the relevant objectives and policies in the Christchurch District Plan. I consider that the proposal is consistent with the objectives and policies in the District Plan.

Subdivision

The objectives and policies for subdivision and development are focused on connectivity and suitability of subdivision design, preserving amenity/natural features and providing allotments for the anticipated use. The relevant objectives and policies for this application are listed in 8.2.2, 8.2.2.1, 8.2.2.2, 8.2.2.3, 8.2.2.4, 8.2.2.5

8.2.2.6, and 8.2.3, 8.2.3.1, 8.2.3.2, 8.2.3.3, 8.2.3.4 and 8.2.3.5.

The proposed allotments are suitable for the anticipated land use of industrial activity as discussed previously in this report. I consider the design of the subdivision generally meets the requirements of the ODP. I consider the proposal to be consistent with the objectives and policies of Chapter 8.

Transport

Objective 7.2.1 'Integrated transport system for Christchurch District' seeks an integrated transport system that is safe and efficient, responsive to needs, supports communities, reduces dependency on private motor vehicles and promotes the use of public and active transport, and is managed using the one network approach⁵. In this instance, and noting that my discretion is restricted to those matters over which the District Plan specifies, I consider the relevant policies to consist of:

Earthworks

The proposal will facilitate development of the site while ensuring that people and property are protected during, and subsequent to, the works. This is consistent with the relevant policy direction within Chapter 8 'Subdivision, Development and Earthworks' of the District Plan. In particular, the proposal accords with; Objective 8.2.4 'Earthworks' and attendant Policies 8.2.4.1 'Water quality', 8.2.4.3 'Benefits of earthworks', and 8.2.4.4 'Amenity, and Objective 8.2.5 'Earthworks health and safety' and accompanying Policies 8.2.5.1 'Land stability', 8.2.5.2 'Nuisance', 8.2.5.3 'Vehicle movement', and 8.2.5.4 'Earthworks design'.

Conclusion

The proposal is consistent with the objectives and policies of the District Plan.

Relevant provisions of a National Environmental Standard, National Policy Statement, Regional Plan, Regional Policy Statement or Coastal Policy Statement [Section 104(1)(b)]

The NES for Electricity Transmission is relevant to the application as the subdivision contains transmission and distribution lines as outlined in the application. Orion and Transpower have reviewed the proposed subdivision and requested the inclusion of conditions relating to works and building near to the electricity distribution setbacks, which have been accepted by the applicant.

The NES for Assessing and Managing Contaminants in Soil to Protect Human Health is relevant to the application as a HAIL activity is being carried out or is more likely than not to have been carried out on the land. The relevant provisions are discussed in previous sections of this report.

For completeness, I note that the District Plan gives effect to the relevant provisions of higher order instruments referred to in s104(1)(b), including the Regional Policy Statement and Regional Plans. As such, there is no need to specifically address them in this report.

Any other matters which are relevant and reasonably necessary to determine the application [Section 104(1)(c)]

There are no other matters relevant to the consideration of this application.

In this case the proposal is not contrary to the objectives and policies, therefore I am satisfied that issues of precedent or plan integrity do not arise.

Part 2 of the Resource Management Act 1991 [Section 104(1)]

The above considerations are subject to Part 2 of the Act which outlines its purpose and principles.

Taking guidance from recent case law⁶, the District Plan is considered to be the mechanism by which Part 2 is given effect to in the Christchurch District. The Plan has recently been reviewed, and was competently prepared via an independent hearing and decision-making process in a manner that appropriately reflects the provisions of Part 2. Accordingly, no further assessment against Part 2 is considered necessary.

Section 106

s106 Consent authority may refuse subdivision consent in certain circumstances

⁵ This approach considers the transport networks as a whole, noting that effects on the network may extend beyond the immediate vicinity.

⁶ *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316

- (1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—
- (a) there is a significant risk from natural hazards; or
 - (b) (repealed)
 - (c) sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.
- (1A) For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—
- (a) the likelihood of natural hazards occurring (whether individually or in combination); and
 - (b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and
 - (c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

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- (a) the likelihood of natural hazards occurring (whether individually or in combination); and
 - (b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and
 - (c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

This section of the Act is particularly relevant in relation to geotechnical concerns following the Canterbury earthquakes. The land is not identified as being within the Liquefaction Management Area in the Christchurch District Plan and rule 5.5.2a does not apply. The land is Green Zoned, with no technical category assigned to the site.

The applicant has submitted a Natural Hazards Assessment report prepared by Eliot Sinclair and Partners Limited which has been reviewed by Council's Subdivision Engineer Yvonne McDonald.

The methodology of the report included review of the pre-purchase geotechnical report and ground contamination (preliminary and detailed site investigation). The pre-purchase geotechnical report was prepared by Eliot Sinclair and Partners Limited and consisted the following methodology; review of New Zealand Geotechnical Database, Council records, GNS, Canterbury maps GIS, 6 test pits, 21 hand augers and scala penetrometers and supplementary shallow soil testing.

Mrs McDonald has made the following comments:

"Eliot Sinclair undertook a review of a pre-purchase geotechnical report and of the Ground Contamination Assessment on the site. The pre-purchase geotechnical report was based on a desktop review. The Ground Contamination Assessment included the following site investigations: 8 transect test pits to between 0.6m to 2.6m bgl on the old alluvial channel alignment, 21 hand augers and associated Scala penetrometers on the proposed road alignment and limited topsoil depth testing. The hand augers found between 0.3-0.7m topsoil over insitu silts, silty sands and sandy silts to between 1.1-3.1m bgl, determined either by finding gravel or reaching 3.0m depth. Using piezometers, Elliot Sinclair estimate groundwater at between 14-16m bgl.

Eliot Sinclair state that 'In relation to MfE's "Planning and Engineering Guidance for potentially liquefaction prone land", Eliot Sinclair has completed a "Level B" assessment which concludes the site has a "Low" vulnerability to liquefaction where "damage due to liquefaction is unlikely".' I agree with that assessment.

The applicant has provided a section 106 assessment and found that there are no natural hazard risks to preclude development. I agree with this assessment and have no geotechnical conditions to apply to this consent.

The applicant has suggested the following conditions:

- Any areas of uncontrolled fill that are known, or may be found during subdivision construction, should be removed and reinstated with controlled, compacted inert fill materials, generally in accordance with the requirements of NZS4431:1989 as a minimum standard.
- Provision shall be made for secondary flows of stormwater from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.”

Mrs McDonald has included these conditions in her proposed earthwork conditions.

I accept the advice provided to me regarding the risk of natural hazards, and conclude that there are no grounds to refuse consent under section 106(1)(a). In terms of section 106(1)(c) I am satisfied that adequate legal and physical access is provided to each allotment.

Recommendations

Land use Consent

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C, 108 and 108AA of the Resource Management Act 1991, subject to the following condition:
1. The development shall proceed in accordance with the information and plans submitted with the application.
 2. No development is permitted on Lots 1 to 40 and 52-53 until such time as the following road connections (legal and physical) are made to the application site:
 - i. To Quadrant Drive to the north.

Any development on the subject lots must comply with all rules in the District Plan except for 16.5.4.1.3 RD3.

Advice Notes: This consent does not permit urban activities on Lot 51 which are balance lots.

3. All earthworks associated with the creation and formation of the subdivision shall be carried out in accordance with the conditions of subdivision consent.

Subdivision

- (A) That the application be processed on a non-notified basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application be granted pursuant to Sections 104, 104C and 106 of the Resource Management Act 1991, subject to the following conditions imposed pursuant to Sections 108, 108AA and 220 of the Resource Management Act 1991:
1. **Compliance with Application Information**
 - 1.1 The survey plan, when submitted to Council for certification is to be substantially in accordance with the stamped approved application plans prepared by Eliot Sinclair, Project No. 442038 Revision N, and Sheets 1 to 6.
 2. **Staging**
 - 2.1 The subdivision may be carried out in stages in accordance with the stamped approved plans.

2.2 Stages 1 and 2 shall not progress until such time as the following road connections (legal and physical) are made to the application site:

- i. To Quadrant Drive to the north (i.e. over Lots 2 and 3 DP 501353).

3. New Road to Vest

.... 3.1 All roads are to be formed and vested in the Council to the satisfaction of the Subdivision Engineer with underground wiring for electricity supply and telecommunications.

4. Local Purpose (Utility) Reserve land

4.1 Lots 101, 102, 42 to 47, 54 and 100 (As shown in Approved Plan 1) are to vest as Local Purpose (Utility) Reserve, clear of any easements.

Advice Note – A Local Purpose (Utility) Reserve, including any landscape improvements, shall hold no credits towards the final Reserve Development Contributions Assessment

Advice note: Any underground infrastructure across land to be vested as Reserve will require an easement application in compliance with s239, prior to the issuing of s224 certificate. The application should be made to the Consent Planner, at the Consent Holders expense.

5. Engineering General

5.1 Asset Design and Construction

All infrastructure assets to be vested in the Council are to be designed and constructed in accordance with the Christchurch City Council's Infrastructure Design Standard (the IDS) and the Construction Standard Specifications (the CSS).

5.2 Quality Assurance

The design and construction of all assets is to be subject to a project quality system in accordance with Part 3: Quality Assurance of the IDS.

A. Submit a Design Report, Engineering Plans, Erosion and Sedimentation Plans, Environmental Management Plan and Design Certificate complying with clause 3.3.2 to the Subdivision Engineers (Planning Team 1). The Design Report and engineering plans are to provide sufficient detail to confirm compliance with the requirements of the IDS and this consent.

B. Submit a Contract Quality Plan for review by the Council and an Engineer's Review Certificate complying with clause 3.3.3.

Physical works shall not commence until a Council Engineering Officer confirms that the above documentation has been received and accepted.

C. Submit an Engineer's Report and Completion Certificate complying with clause 3.3.4.

An Engineer's Report is a document specific to a project, which describes how the project was managed and administered in compliance with the IDS, the Construction Standard Specifications, the Contract Quality Plan and the resource consent or project brief. It provides background information to the release of the 224(c) certificate.

Note: Part 3 of the IDS sets out the Council's requirements for Quality Assurance. It provides a quality framework within which all assets must be designed and constructed. It also sets out the process for reporting to Council how the works are to be controlled, tested and inspected in order to prove compliance with the relevant standards. It is a requirement of this part of the IDS that certification is provided for design and construction as a pre-requisite for the release of the 224c certificate. The extent of the documentation required should reflect the complexity and/or size of the project.

In addition to the above, all infrastructure is to be designed to resist the effects associated with earthquake induced liquefied soils. All liquefaction hazard mitigation shall be designed for a 1 in 150 year return period serviceability limit seismic design event and a 1 in 500 year return period ultimate limit state seismic design event as defined in NZS1170.5.2004.

5.3 Traffic Management

An approved Traffic Management Plan (TMP) shall be implemented and no works are to commence until such time as the TMP has been installed. The TMP shall be prepared by an STMS accredited person and submitted to and approved by the Christchurch Transport Operation Centre – please refer to www.tmpforchch.co.nz

5.4 *Survey Plan Requirements*

The surveyor is to forward a copy of the title plan and survey plan to the Subdivision Planner (that issued the consent), Resource Consents & Building Policy Unit as soon as the plan has been lodged (or earlier if possible) for checking at Land Information New Zealand for entering into the Council GIS system.

5.5 *Laterals for rear Lots*

All private sewer and stormwater laterals (serving rear lots) shall be installed under a single global Building Consent by a Licensed Certifying Drain Layer and the Code Compliance Certificate forwarded to Council's Subdivision Team as part of the Sec 224c application.

5.6 *CCTV Inspections*

Pipeline CCTV inspections are to be carried out on all gravity pipelines in compliance with the Council Standard Specifications (CSS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/construction-standard-specifications/pipeline-cctv-inspections/>

5.7 *Services As-Built Requirements*

As-Built plans and data shall be provided for all above and below ground infrastructure and private work in compliance with the Infrastructure Design Standards (IDS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/infrastructure-design-standards/as-built-survey-and-data-requirements/>

Note: this includes RAMM and costing data

As-Built Plans are to be provided for any easements in gross over pipelines. The plans are to show the position of the pipelines relative to the easements and boundaries.

6. Water Supply

6.1 The points of water supply for the subdivision shall be the existing DN200 uPVC water main in Quadrant Drive and the existing DN200 AC water main in Shands Road.

6.2 The water supply shall be designed by a suitably qualified person in accordance with the Infrastructure Design Standard and in accordance with the NZ Fire Service Fire Fighting Water Supplies Code of Practice NZS 4509:2008 to the satisfaction of the Water & Wastewater Asset Planning Team. Engineering drawings supported by hydraulic model outputs shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water & Waste Asset Planning Team prior to the commencement of any physical work.

6.3 With the exception of the water main connection between Lot 60 (Road to Vest) and through Lot 102 (Local Purpose (Utility) Reserve to vest in Christchurch City Council) to the point of supply in Shands road, all water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.4 All water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.5 Water mains shall be extended along the full length of roads to vest and be terminated with temporary hydrants as per the requirements of the Infrastructure Design Standard.

6.6 The construction of Council vested water infrastructure shall be carried out by a Council approved water supply installer at the expense of the applicant.

6.7 Lots 1-40, 52 and 53 shall be served with a water supply to their boundary. Submains shall be installed to 1m past each lot boundary.

7. Sewer

7.1 Lots 1-40, 52 and 53 shall be serviced by a Local Pressure Sewer System (LPSS) designed in accordance with Council's Infrastructure Design Standards and Construction Standard Specifications. Engineering drawings supported by hydraulic calculations shall be sent to the Subdivisions Engineer

for Engineering Acceptance by the Three Water and Waste Planning Team prior to the commencement of any physical work

- 7.2 The approved sanitary sewer outfall for Lots 1-40, 52 and 53 shall be the DN225 uPVC gravity sewer main in Quadrant Drive.
- 7.3 The consent holder shall put in place measures to enable the initial operation of the local pressure sewer system within and from the subdivision during the build phase, including (but not limited to) ensuring self-cleansing flow and limiting sewage retention time within the system when the design number of pressure sewer tanks are not yet in operation. These measures shall be reported to the Subdivisions Engineer prior to seeking section 224(c) certification.
- 7.4 With the exception of Lot 51, each lot shall have a Boundary Kit located within the legal road. The pressure lateral from the Boundary Kit must extend at least 600mm into the net site of each lot.

Advice note: A sewer connection for Lot 51 shall not be available until wastewater capacity has been confirmed by Council and such a connection may not be approved for discharge to the sewer outfall identified for Lot 1 to Lot 40, 52 & 53.

- 7.5 Installation of the pressure sewer mains and boundary kits shall be carried out by a Council Authorised Drainlayer (Pressure Sewer Reticulation).
- 7.6 Provision will be made for odour treatment and corrosion protection at the discharge point in Quadrant Drive in accordance with Council's Infrastructure Design Standards, Construction Standard Specification and operational requirements. Engineering drawings supported by design calculations and specifications for the odour treatment facility and corrosion protection works shall be sent to the Subdivision Engineer for Engineering Acceptance prior to the commencement of any physical work.

Advice Note: Council may reach an agreement with the Developer to establish the odour treatment facility approximately 600 metres downstream at PS82 in Produce Place in order to streamline future operations.

- 7.7 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2):

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

8. Sewer (Stage 2 – Lot 51 only)

- 8.1 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lot 51:

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

9. Stormwater

9.1 The stormwater management and mitigation system to be constructed under this application shall rely on stormwater treatment and disposal to ground via infiltration. The system shall be comprised of channels, sumps, pipes, swales, first flush soil adsorption basins, detention basins and/or rapid infiltration systems. In addition to the below conditions, the system shall meet the requirements of the CCC Waterways, Wetlands and Drainage Guide (WWDG), the Infrastructure Design Standard (IDS 2018) and the Construction Standard Specifications (CSS 2018).

9.2 The consent holder shall demonstrate that authorisation for operational and construction phase stormwater discharge has been obtained from the relevant authority.

9.3 Stormwater generated from roofs of all buildings shall be collected via a sealed stormwater system separated from all other stormwater and discharged into an onsite rapid soakage system.

9.4 The following consent notice shall be registered on the title of all allotments Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2) to ensure ongoing compliance with consent conditions:

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

9.5 Stormwater generated from all roads and hardstanding areas within all allotments (except Lot 28 and Lot 51) shall be collected via channels, sumps, pipes or swales and discharged into first flush soil adsorption basins and detention/rapid soakage facilities located within allotment to be vested in Christchurch City Council as Local Purpose (Utility) Reserve. The first flush soil adsorption basins shall:

- a. Utilise a vegetated swale, sediment forebay or alternative approved pre-treatment system;
- b. Be designed to hold (at minimum) the volume of stormwater runoff generated from the first 25mm of rain falling on roading and hardstand areas within the development site;
- c. Utilise 150mm depth of treatment media consisting of sand/topsoil mixture to be specified by Council engineers during engineering design phase;
- d. Utilise a 250mm depth of 19mm concrete "pre-mix" or other approved drainage layer mix below the treatment media;
- e. Discharge to free-draining gravels after passing through the treatment media and drainage layers. If free draining gravels are not encountered at the design depth, unsuitable material shall be excavated and backfilled with free-draining washed rock;
- f. Have average batter slopes of 1 vertical in 4 horizontal, or flatter, and;
- g. Be planted with an approved grass species on the basin floor and an approved grass mix and/or approved tree and shrub plantings on the batter slope.

- 9.6 Stormwater generated in excess of the first flush volume shall discharge via flow splitter or upstream weir into separate detention/rapid soakage basins. The detention/rapid soakage basins shall:
- a. Be designed to hold the volume required to capture and dispose of the critical 2 percent annual exceedance probability storm, but not less than the stormwater volume generated from a 10% AEP, 18-hour storm, minus the first flush volume;
 - b. Utilise either rapid soakage chambers/trenches designed in accordance with WWDG Section 6.5 or a fully gravelled base extending down to natural free draining gravels;
 - c. Have average batter slopes of 1 vertical in 4 horizontal or flatter;
 - d. Be planted with an approved grass mix and/or approved tree and shrub plantings on the basin floor and batter slopes.
- 9.7 The consent holder shall confirm, by Detailed Site Investigation and Validation Report (if required) that soil contaminants within all Local Purpose (Utility) Reserves containing stormwater basins or swales are below ANZECC SQG-High Sediment Quality guidelines.
- 9.8 A landscape buffer of average width 5 metres is to be established between all stormwater basins and all allotments. The Council engineer may, at their discretion, allow some variance to this buffer width and planting requirements.
- 9.9 The stormwater management and mitigation system shall be designed to ensure complete capture, retention and disposal of all stormwater runoff from the site for all rainfall events up to and including the critical two percent annual exceedance probability storm. This will require internal reticulation and conveyance to meet Council's inundation standards as specified in the WWDG. The conveyance system shall be designed to ensure that even for events where the critical peak stormwater runoff flow rate occurs that all resulting runoff reaches the first flush treatment system. A combination of primary and secondary conveyance systems may be used to ensure this level of service is achieved.
- 9.10 The primary stormwater reticulation network shall be designed to convey (at minimum) the critical twenty percent annual exceedance probability storm event. No flooding of private property shall occur during the critical ten percent annual exceedance probability storm event and no flooding of buildings shall occur during the critical two percent annual exceedance probability storm event.
- 9.11 Prior to the commencement of engineering works, the consent holder shall demonstrate, by means of appropriate site testing (by a suitably qualified professional) that the 'design' soakage rates for the infiltration systems are able to be achieved within the stormwater disposal sites. Measured soakage rates, determined by test, shall be reduced by a factor of three (or more) in the final design of the soakage system.
- 9.12 At the time of excavation of the actual infiltration site/s during the construction phase of the development, the consent holder shall confirm that the initial assumptions of infiltration rates, derived from the preliminary testing, are appropriate. Subject to this investigation, the Council may review these conditions pursuant to Section 128 of the Act to require the consent holder to alter the engineering design.
- 9.13 The proposed soakage areas are not to be used for major construction sedimentation control sites. The sediment control management plan for the development works shall be designed such that any sediment discharge or accumulation within the proposed soakage areas is avoided. Care is to be taken during construction to ensure that the natural permeability of the soils is not compromised by heavy machinery use or other construction activities.
- 9.14 Upon practical completion of the first flush soil adsorption basins and prior to issuance of the s224c certificate, hydraulic conductivity testing of all installations shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 75mm-300mm per hour, with no single test result less than 50mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.

- 9.15 To ensure compliance with the above conditions, the value of restoration of all first flush soil adsorption basins shall be determined and agreed by the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit. The consent holder shall bond that sum with the Council prior to the issuance of the Section 224(c) Certificate.
- 9.16 Safe and adequate access to surface water mitigation facilities for maintenance and sediment removal shall be provided and designed in accordance with WWDG Sections 6.8 & 6.9.
- 9.17 The consent holder shall provide easements in gross over all stormwater infrastructure located outside of legal road or utility reserve areas to be vested with Council.
- 9.18 The consent holder shall submit an Engineering Design Report to the CCC 3 Waters and Waste Planning Unit and Resource Consents Unit for acceptance. The Engineering Design report shall demonstrate how the design will meet all of the applicable standards and shall contain all of the plans, specifications and calculations for the design and construction of all stormwater infrastructure and mitigation systems.
- 9.19 The designer of the surface water management system shall provide a report which identifies all overland flow paths proposed in the event of infiltration system failure or storm events that exceed the capacity of the system. All overland stormwater flow paths are to be identified and protected by easement if required.
- 9.20 The consent holder shall provide as-built plans of the surface water management systems and facilities and confirm that they have been constructed in accordance with the approved plans and comply with the IDS, particular Part 3: Quality Assurance and Part 12: As-Builts.
- 9.21 A landscape plan of the proposed stormwater facilities and their buffers shall be submitted for acceptance by the Council's Resource Consents Unit. Landscaping required by this condition is to be carried out in accordance with the approved plan at the consent holder's expense. The consent holder shall maintain all planting for a minimum of 24 months from the time of issue of the Section 224 Certificate.
- 9.22 The consent holder shall operate and maintain surface water mitigation facilities and infrastructure to vest into Council for a Defects Liability Period of 24 months following the issue of the Section 224(c) certificate in accordance with the provisions of NZS 3910:2013.
- 9.23 No more than 90 days prior to the expiry of the Defects Liability Period, hydraulic conductivity testing of the soil adsorption basin(s) shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 50mm-300mm per hour, with no single test result less than 30mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.
- 9.24 A Maintenance and Operations manual for all surface water management and mitigation facilities shall be provided and shall form part of the Resource Consents and 3 Waters Planning Unit acceptance. This manual is to include a description of the activity, the design assumptions, maintenance schedule and monitoring requirements.

10. Stormwater (Lot 28 - Stage 1 Only)

- 10.1 Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.
- 10.2 The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual

exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDG to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

11. Access Construction Standards

- 11.1 The access formation shall be designed and constructed in accordance with the CCC Infrastructure Design Standard. Physical works shall not commence until a Council engineering officer confirms that the Design Report, Plans and Design Certificate complying with clause 3.3.1 of the IDS and the Contract Quality Plan and Engineer's Review Certificate complying with clause 3.3.2 has been received by Council.

Advice note: This condition is relevant to Lots 29, 33-39

12. Street Lighting

- 12.1 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

13. Engineering Plans

- 13.1 Engineering plans for the construction of the new road(s), shared accesses, street lighting, drainage, sediment control, water supply, earthworks, landscaping and tree planting shall be lodged with the Subdivisions Engineer and approved prior to the commencement of any physical works. All works are to be in accordance with Council's Infrastructure Design Standard.

- 13.2 Engineering works are to be installed in accordance with the approved plans.

14. Transport

- 14.1 A 2.5 metre wide shared path is to be constructed on Lot 102 and shall link to the path on Shands Road.

- 14.2 Road safety audits shall be undertaken as part of the detailed engineering design report and post-construction by a suitably qualified independent traffic engineer.

Advice note: There may be changes required to the road design as a result of the recommendations of the road safety audit.

- 14.3 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

15. Greenspace

Reserve Landscape Plans

- 15.1 Landscape Plans for Reserves (Lots 101 and 102 (Stage 1) 42, 43, 44, 45, 46, 47, 54 100 (Stage 2)) are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.

Advice Note – Where the Consent Holder has applied to vest assets as detailed on Accepted Landscape Plans, but the Asset and Network Unit (Parks) have not agreed to the value of the assets being credited against the Reserve Development Contributions or to reimburse the value of the assets

to the Consent Holder, then the Consent Holder may vest the assets at their own expense, with the agreement of the Council's Parks Unit.

- 15.2 The Landscape Plans are to provide sufficient detail to confirm compliance with the requirements of the IDS, the CSS, and the WWDG: 2003. All landscaping required by this condition is to be carried out in accordance with the accepted plan(s) at the Consent Holder's expense, unless otherwise agreed.
 - 15.3 The Consent holder shall maintain plants on Reserve Lots 42, 43, 44, 45, 46, 47, 54, 100, 101 and 102 for the **24 months** Establishment Period (Defects Maintenance), until a final inspection and acceptance of the landscaping by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes (current version).
 - 15.4 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of plants/trees and the works undertaken during the Establishment Period. The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version)).
 - 15.5 The relevant Council Unit staff may carry out an inspection of the reserve plants/trees after the first **6-12 months**, and a final inspection will be carried out at the end of the **24 month** Establishment Period (Defects Maintenance). Where it is not possible to determine the condition of plants/trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined.
 - 15.6 The Consent holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to replace and replant all plants/trees on reserves. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **12/24 months** for the replacement planting(s), as required (e.g. in a situation where 50% or more of the landscaping is not accepted). The bond shall be released after the plants and trees have been inspected and Accepted by the relevant Council Parks Operations staff.
 - 15.7 Any replacement plantings and establishment period required due to plants/trees not being accepted are to be carried out at the Consent Holder's expense.
- Street Tree Landscape Plans
- 15.8 Street tree landscape plans are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.
 - 15.9 The Landscape Plan(s) are to provide sufficient detail to confirm compliance with the requirements of the IDS (current version) and the CSS (current version).
 - 15.10 The Consent Holder shall maintain the street trees for the **24 months** Establishment Period (Defects Maintenance) until final inspection and acceptance of the trees by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes.
 - 15.11 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of the trees and the works undertaken during the Establishment Period (Defects Maintenance). The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested. (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version)).
 - 15.12 The Team Leader Road Amenity & Asset Protection or his/her nominee may carry out an inspection of the trees after the first **6-12 months** and a final inspection will be carried out at the end of the **24 month** Establishment Period. Where it is not possible to determine the condition of trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined).
 - 15.13 The Consent Holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to supply, replant and establish all street trees. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **24 months** for the trees(s), if required (e.g. in a situation where 50% or more of the trees are not accepted). The bond shall be released after the trees have been accepted by the Team Leader Road Amenity & Asset Protection or his/her nominee.

- 15.14 Any replacement plantings and establishment period required due to trees not being accepted are to be carried out at the Consent Holder's expense.

Final Completion / Handover (Reserves and Street Trees)

- 15.15 The Consent Holder shall submit, the required completion documentation in accordance with IDS Part 2:2.12 Completion of Land Development Works and the Quality Assurance System to provide evidence that the work is completed in accordance with the agreed standards and conditions of this consent. This is to be submitted, on completion of the **24 month** Establishment Period, prior to final inspection for formal handover to Council and release of the Establishment Bond.

As – Builts (Reserves and Street Trees)

- 15.16 The Consent Holder shall submit As-Built plans for any landscape improvements on land to be vested as reserve and for any street trees, in accordance with IDS, Part 12 As-Builts records and validated **before the s224 certificate is issued.**

16. Electricity Transmission (66kV lines)

- 16.1 The detailed design for the new road over proposed Lot 60 and 61 in the vicinity of the existing 66kV electricity distribution lines shall demonstrate compliance with the New Zealand Electrical Code of Practice for Electrical Safe Clearance Distances 34:2001 (NZECP34:2001).

- 16.2 The following consent notice shall be registered on the titles of Lots 7, 8, 16 and 17 to ensure ongoing compliance with consent conditions:

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kV overhead powerlines and 10m from the tower foundations.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

17. Electricity Transmission (220kV transmission line)

Earthworks

- 17.1 No excavation or disturbance of the land around the National Grid Towers; shall:
- Exceed a depth greater than 300mm within 6 metres of the outer edge of the visible foundations of the tower; or
 - Exceed a depth greater than 3 metres between 6 metres and 12 metres of the outer edge of the visible foundation of the tower; or
 - Create an unstable batter.
- 17.2 No fill or material shall be stockpiled or deposited under the National Grid transmission lines so that the conductor to ground clearance is reduced to less than 8.0m.
- 17.3 The consent holder must ensure that the discharge of dust and/or particulate matter from the activities authorised by this consent do not create any dust hazard or nuisance to the National Grid transmission lines, including support structures. A dust hazard or nuisance will occur if;
- There is visible evidence of suspended solids in the air; and/or
 - There is visible evidence of suspended solids traceable from a dust source (from the site works) settling on the transmission lines and/or support structures.

Mobile Plant

- 17.4 All machinery and mobile plant operated in association with the works shall maintain a minimum clearance distance of 4 metres from the National Grid transmission lines at all times.
- 17.5 A warning sign must be clearly displayed at the operator position on any mobile plant stating **"WARNING, KEEP 4M MINIMUM CLEARANCE FROM TRANSMISSION LINES AT ALL TIMES"**.
Important Note: For specific clearance restrictions, refer to the **BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020.**

People

- 17.6 All people working on site, must maintain a safe separation distance of at least 6 metres between themselves (including any tools they are carrying) and the conductors (wires) of any National Grid transmission lines at all times.

Stormwater

- 17.7 The consent holder must ensure that changes to the stormwater drainage patterns and runoff characteristics arising from the works do not result in adverse effects on the foundations of any National Grid support structure.

Vegetation planted prior to s.224(c) approval

- 17.8 Any proposed new trees or vegetation within 12m either side of the centreline of the National Grid transmission must not exceed 2 metres in height at full maturity; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.9 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line, must be setback sufficiently to ensure the tree cannot fall within 4 m of the lines; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Construction Management Plan

- 17.10 Prior to the commencement of physical site works, the consent holder shall prepare and submit to the Council for information, a Construction Management Plan (CMP) to ensure the protection of the National Grid transmission lines. The CMP must be given to Transpower NZ Ltd for its certification at least 20 working days prior to being submitted to the Council.

Note: The CMP should be sent to Transpower at transmission.corridor@transpower.co.nz

- 17.11 The CMP must include the following (but is not limited to):
- a) The name, experience and qualifications of the person/s nominated by the consent holder to supervise the implementation of, and adherence to, the CMP.
 - b) Details of the contractor's liability insurance held to cover any costs, direct or indirect, associated with any damage to the National Grid transmission lines, directly or indirectly caused by works undertaken to give effect to this consent.
 - c) Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34: 2001) or any subsequent revision of the code; and the recommendations within the Electrical Clearance Report, "BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020"; including (but not limited to) those relating to:
 - i) Excavation and Construction near Towers (Section 2);
 - ii) Ground to conductor clearances (Section 4);
 - iii) Mobile Plant to conductor clearances (Section 5); and
 - iv) People to conductor clearances (Section 9).
 - d) Details of any areas that are "out of bounds" during construction and/or areas within which additional management measures are required, such as fencing off, entry and exit hurdles, maximum height limits, or where a safety observer may be required (a safety observer will be at the consent holder's cost.
 - e) Demonstrate how the effects of dust (including any other material potentially resulting from construction activities able to cause material damage beyond normal wear and tear) on the transmission lines will be managed;
 - f) Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures.
 - g) Details of proposed contractor training for those working near the transmission lines.

- 17.12 All works/activities are to be undertaken in accordance with the approved CMP.

Consent Notice

- 17.13 All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

- 17.14 No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.
- 17.15 No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.
- 17.16 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.17 Conditions 17.13-16 (inclusive) shall be the subject of a consent notice on the title for proposed Lots 28, 30, 31, 32 and 33 – 40 (inclusive).

Advice notes:

- a) *Transpower NZ Ltd has a right to access its existing assets under s23 of the Electricity Act 1992. Lot design must not preclude or obstruct this right of access. It is an offence under s163(f) Electricity Act to intentionally obstruct any person in the performance of any duty or in doing any work that the person has the lawful authority to do under s23 of the Electricity Act 1992.*
- b) *For specific clearance restrictions, refer to the “BROMLEY-ISLINGTON-A, Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020”.*
- c) *Lots 42-45 (inclusive) and Lot 100 to be vested in the Christchurch City Council as Local Purpose (Utility) Reserve must not be developed with amenity planting or fences, structures, etc. that prevent Transpower obtaining practical access to transmission line support towers.*
- d) *Access to Transpower’s transmission line support tower #67 of the BRY-ISL-A located on Lot 100 must be maintained free of restriction from the east – via the new road extension south of Quadrant Drive and to the south of Lots 31 & 32.*

18. Earthworks

- 18.1 Earthworks shall be carried out in accordance with approved plans 19 to 23.

The earthworks and construction work shall be under the control of a nominated and suitably qualified engineer.

- 18.2 The Erosion and Sediment Control Plan shall show the positions of all stockpiles on site. Temporary mounds shall be grassed or covered to prevent erosion until such time as they are removed.

Advice note: Topsoil shall not worked excessively, to protect the integrity of the soil microbes.

- 18.3 All filling and excavation work shall be carried out in accordance with an Environmental Management Plan (EMP) which shall include an Erosion and Sediment Control Plan (ESCP). Unless approved as part of a separate ECan resource consent for stormwater discharge or ECan resource consent for excavation/filling the ESCP will require formal acceptance by Christchurch City Council’s Subdivision Engineer (email to rcmon@ccc.govt.nz) prior to any work starting on site. The ESCP shall be designed by a suitably qualified person and a design certificate (on the Infrastructure Design Standard Part 3: Quality Assurance Appendix IV template <https://www.ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/IDS/IDS-Part-03-Quality-Assurance-V3-September-2016.PDF>) supplied with the ESCP for acceptance at least 5 days prior to the works commencing.

- 18.4 The best practice principles, techniques, inspections and monitoring for erosion and sediment control shall be based on ECan’s Erosion and Sediment Control Toolbox for Canterbury <http://esc Canterbury.co.nz/>. The ESCP shall include (but is not limited to):

- The identification of environmental risks including erosion, sediment and dust control, spills, wastewater overflows, dewatering, and excavation and disposal of material from contaminated sites;
- A site description, i.e. topography, vegetation, soils, etc;
- Details of proposed activities;
- A locality map;

- Drawings showing the site, type and location of sediment control measures, on-site catchment boundaries and off-site sources of runoff;
- Drawings and specifications showing the positions of all proposed mitigation areas with supporting calculations if appropriate;
- Drawings showing the protection of natural assets and habitats;
- A programme of works including a proposed timeframe and completion date;
- Emergency response and contingency management;
- Procedures for compliance with resource consents and permitted activities;
- Environmental monitoring and auditing, including frequency;
- Corrective action, reporting on solutions and update of the EMP;
- Procedures for training and supervising staff in relation to environmental issues;
- Contact details of key personnel responsible for environmental management and compliance.

Note: IDS clause 3.8.2 contains further detail on Environmental Management Plans. The EMP may include the Remedial Action Plan.

- 18.5 The accepted ESCP shall be implemented on site over the construction phase earthworks, and any earthworks for remediation if required. No earthworks shall commence on site until:
- The contractor has received a copy of all resource consents and relevant permitted activity rules controlling this work
 - the ESCP has been installed.
 - an Engineering Completion Certificate (IDS – Part 3, Appendix VII), signed by an appropriately qualified and experienced engineer, is completed and presented to Council. This is to certify that the erosion and sediment control measures have been properly installed in accordance with the accepted EMP.
- 18.6 Dust emissions shall be appropriately managed within the boundary of the property in compliance with the Regional Air Plan. Dust mitigation measures such as water carts or sprinklers shall be used on any exposed areas. The roads to and from the site are to remain tidy at all times.
- 18.7 Notify Christchurch City Council no less than ten working days prior to works commencing, (email to rcmon@ccc.govt.nz) of the earthworks start date and the name and contact details of the site supervisor.
- 18.8 Any change in ground levels shall not cause a ponding or drainage nuisance to neighbouring properties. All batters shall be formed within the applicant's property unless written permission is obtained from the affected landowner.
- 18.9 Any change in ground levels shall not affect the stability of the ground or fences on neighbouring properties.
- 18.10 The fill sites shall be stripped of vegetation and any topsoil prior to filling. The content of fill shall be clean fill.
- 18.11 All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for Earthfill for Residential Purposes NZS 4431:1989. At the completion of the work an Engineers Earthfill Report, including a duly completed certificate in the form of Appendix A of NZS 4431, shall be submitted to Council at rcmon@ccc.govt.nz for all lots within the subdivision that contain filled ground. This report shall detail depths, materials, compaction test results and include as-built plans showing the location and depth of fill and a finished level contour plan.
- 18.12 The consent holder shall submit a report and calculations detailing any filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties. Any retaining wall construction shall be included and certified as part of the Earthfill Report.

Note: Any retaining wall that exceeds 6m² is regarded as a building and requires a separate resource consent if not specifically addressed within the application supporting this consent.

Note: This report may be presented as part of the Design Report for the subdivision works under condition 1 (subdivision design report and QA).

- 18.13 Any areas of uncontrolled fill that are known, or may be found during subdivision construction, shall be removed and reinstated with controlled, compacted inert fill materials, generally in accordance

with the requirements of NZS4431:1989 as a minimum standard. These areas shall be included in the records provided under the Earthfill Report in condition 11.

- 18.14 Provision shall be made for overland stormwater flows from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.

Advice note: This condition is relevant for stages 1 and 2.

- 18.15 All bared surfaces shall be adequately topsoiled and vegetated as soon as possible to limit sediment mobilisation.
- 18.16 Should the Consent Holder cease or abandon work on site for a period longer than 6 weeks, or be required to temporarily halt construction during earthworks, they shall at first take adequate preventative and remedial measures to control sediment discharge / run-off and dust emission, and shall thereafter maintain these measures for as long as necessary to prevent sediment discharge or dust emission from the site.

19. Health of Land

- 19.1 A Remedial Action Plan (RAP) shall be prepared for Lots 1 – 40, 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 by a suitably qualified and experienced practitioner in the assessment and management of contaminated land. The RAP shall be prepared in general accordance with Contaminated Land Management Guidelines, No.1, Ministry for the Environment (revised 2011), and shall include (but not be limited to) a detailed discussion of the remedial options available and the extent of remedial works required, the methods of validation and the necessary pre-remediation site management procedures (e.g. fencing, warning signs, stormwater diversion, etc), that will avoid, mitigate, or remedy any adverse effects of the remedial works on human health. If remediation works are to be staged, a Remedial Action Plan will address this.

- 19.2 At least 10 working days prior to the commencement of the remedial works, the RAP shall be submitted to Council for review and certification that it is within the scope of this consent and it meets the conditions of this consent.

- 19.3 The consent holder shall submit a Site Validation Report to Council, Attention: Team Leader Environmental Health, by way of email to rcmon@ccc.govt.nz no later than 20 working days following the completion of soil disturbance. The Site Validation Report shall include but not be limited to:

- a) Details of the project works completed
- b) A site plan showing the location and volume of the completed earthworks and drawing of the 'as built' state of the site.
- c) For soils imported to site; information on the soil source site and any sample results.
- d) Documentation of any incidents and how they were resolved
- e) The results of any sampling undertaken.
- f) The soil guideline value that the site has been remediated to
- g) Records of the disposal of material identified as containing concentrations of contaminants above background levels. The record shall include:
 - (i) The approximate location of the site where the contaminated material was found;
 - (ii) The name of the person and company that collected the contaminated material from the site;
 - (iii) The date of collection;
 - (iv) The destination of the material;
 - (v) A description of the material, including known contaminants; and
 - (vi) The volume of the material collected.
 - (vii) Evidence of that disposal to an authorised facility.

- 19.4 The Site Validation Report for Lots 1 – 40, Lots 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 shall be written in accordance with the Ministry for the Environment Guideline for Reporting on Contaminated Sites in New Zealand (revised 2011). If works are staged, the Site Validation Report will be provided for each stage.

20. Plans for Geodata Plot

- 20.1 As soon as practical after the Section 223 certificate has been issued the consent holder is to advise the handling officer that the digital dataset for the subdivision is available in Land online and can be used for creation of the parcels in Council's digital database.

- 21. As Built Plans**
21.1 As built plans of stormwater retention/detention basins and swales are to be forwarded to the Subdivision Engineer together with capacity calculations to confirm that the works have been constructed in accordance with the engineering plan.
- 22. Filled Land**
22.1 All filling is to be carried out using good quality inert engineering material free of organic, putrescible or hazardous components, and in accordance with the rules in Chapter 8.9 of the District Plan. Topsoil is to be stripped and stockpiled on the site for later spreading over the filled land. All filling shall be compacted in even layers using appropriate mechanical equipment and under the general control of a suitably qualified Engineer. A report is to be submitted to Council by the Engineer detailing the extent of the filling and the nature of the fill material utilised.
- 23. Telecommunications and Energy Supply**
23.1 All lots shall be provided with the ability to connect to a telecommunications and electrical supply network at the boundary of the net area of each lot. Confirmation that the ducts or cables have been laid to the boundary of the net area is required.
23.2 The consent holder is to provide a copy of the reticulation agreement letter from the telecommunications network operator and a letter from the electrical energy network operator, or their approved agent to confirm capacity is available to the sites.
- 24. Right of Way Easements**
24.1 The rights of way easements as set out on the application plan shall be duly granted or reserved.
- 25. Service Easements**
25.1 The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.
25.2 Easements over adjoining land or in favour of adjoining land are to be shown in a schedule on the Land Transfer Plan. A solicitor's undertaking will be required to ensure that the easements are created on deposit of the plan.
- 26. Existing Easements over areas of Road to Vest**
26.1 The portion of the existing easements that extend over the road to vest are to be surrendered.
- 27. Easements over Reserves**
27.1 Easements over land that is to vest in the Council as reserve are to be shown on the survey plan in a Schedule of Easements. A solicitor's undertaking shall be provided to ensure that the easement is registered on the subject reserve at the time title is created. A section 223 certificate will not issue until such time as a section 239 certificate is issued by Council.
- 28. Existing easements under reserve to vest**
28.1 If the Council requires the retention of existing easements over land that is to vest in the Council as Reserve a certificate pursuant to Section 239(2) of the Resource Management Act 1991 will be issued.
- 29. Easements in Gross**
29.1 The legal instruments for easements in gross in favour of the Council are to be prepared by Council's consultant solicitor at the consent holder's cost. The consent holder's solicitor is to contact Anderson Lloyd Lawyers (Mike Kerr) requesting the preparation of the easement instruments. As built plans for the services covered by the easement are to be provided at Section 223 certification stage.
- 30. Road and/or Lane Names**
30.1 The consent holder shall order and install the road's nameplates. The nameplates shall be designed and installed in accordance with the IDS and CSS.
30.2 The location of the nameplates shall be submitted to Council's Subdivision Engineer for approval prior to their installation.

Advice Note: Nameplates usually take six weeks to manufacture. The location of the nameplates can be submitted in a plan which identifies the road's landscaping and location of street lighting as

required by this application. The consent holder is responsible for the cost of providing and installing the nameplates.

31. Amalgamations

31.1 The following amalgamation condition has been approved by Land Information New Zealand. The condition is to be included in the digital Title Plan dataset:

Stage 1:

“That Lot 14 hereon be transferred to the owner of Lot 1 DP 397987 (RT 391288) and one record of title be issued to include both parcels (CSN Request 1663316)

Stage 2:

That Lot 51 hereon and Lot 2 DP 436436 and Lot 3 DP 318553 (residue RT 944686) be held in the same record of title (CSN Request 1663316)”

32. Public Utility Sites

32.1 Any public utility site and associated rights of way easements and/or service easements required by a network operator are approved provided that they are not within any reserves to vest in the Council.

33. Consent Notice

Sewer – Lots 2 to 30 (Stage 1)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer – Lots 1, 31 to 40, 52 and 53 (Stage 2)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer (Stage 2 – Lot 51 only)

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Stormwater – Stage 1 – Lots 2 to 30

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater - Lots 1, 31-40, 52 and 53 (Stage 2)

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater – Lot 28 – Stage 1

Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.

The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDG to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Electricity Transmission – Lots 7, 8, 16 and 17 (Stage 1)

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kv overhead powerlines and 10m from the tower foundations.

Electricity Transmission – Lots 28, 30 (Stage 1)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Electricity Transmission Lots 31, 32 and 33-40 (Stage 2)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

34. Goods and Services Taxation Information

34.1 The subdivision will result in non-monetary contributions to Council in the form of land and/or other infrastructure that will vest in Council. Council's GST assessment form is to be completed to enable Council to issue a Buyer Created Tax Invoice.

35. Lapsing of Consent

35.1 The period within which this consent may be given effect to shall be 5 years from the date on which consent was granted. The consent will be given effect to when the survey plan has been certified pursuant to Section 223 of the Resource Management Act 1991.

ADVICE NOTES FOR CONSENT HOLDERS, TO BE READ IN CONJUNCTION WITH THE DECISION

Surrender of Consent

The Council hereby provides notice that under section 138(4) of the Act that the consent RMA/2020/1200 is surrendered in whole under section 138 of the Act.

Your Rights of Objection

If you do not agree with the Council's decision on this resource consent application, the conditions, or any additional fees that have been charged, you may lodge an objection with the Council under Section 357 or 357B of the Resource Management Act 1991. You have 15 working days from the date you receive this letter within which to lodge your objection **to the decision**. Objections **to additional fees** must be received within 15 working days of the date on which you receive the invoice. Your objection must be in writing and should clearly explain the reasons for your objection.

Commencement of this consent

The commencement date for your resource consent is the date of this letter advising you of the Council's decision, unless you lodge an objection against the decision. The commencement date will then be the date on which the decision on the objection is determined.

Lapsing of this consent

This resource consent for subdivision will lapse 5 years after the date of commencement of consent (i.e. the date of this letter) unless it has been given effect to by the Council issuing a certificate pursuant to Section 223 of the Resource Management Act 1991.

Application may be made under Section 125 of the Resource Management Act 1991 to extend the duration of the resource consent, and this must be submitted and approved prior to the consent lapsing.

Lapsing of s223 Certification

The s223 certification will lapse 3 years after the date of issue, the Section 223 certificate will lapse (if that certified plan has not been deposited in accordance with Section 224 of the Resource Management Act 1991). The s223 certificate can be re-certified only if the subdivision consent has not lapsed.

Electricity Transmission

Vegetation to be planted around the electricity distribution lines shall be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

Any construction works including the operation of mobile machinery in the vicinity of the electricity distribution lines must comply with the NZECP34:2001.

The detailed design for the stormwater basin to be constructed on Lot 101 under the existing 66kV electricity distribution lines shall comply with the NZECP34:2001

Vehicle access to Lots 33-39

It is noted either bridges or culverts will be required to gain access onto these sites. The culvert/bridge design will be finalised at the engineering design phase of this application.

Development Contributions

This proposal has been assessed for development contributions (DCs) under the provisions of the [Christchurch City Council Development Contributions Policy](#) (DCP). The proposal has been found to create additional demand on network and community infrastructure or reserves.

To help fund community facilities, the Local Government Act 2002 (LGA) allows a council to require development contributions if the effect of a development requires the council to provide new or upgraded infrastructure.

This Notice informs you of the DCs required by the Council for the development but is not a request for payment. An invoice will be issued by the Council when it requires payment of the DC's. Payment will be required before issue of a code compliance certificate for a building consent, commencement of the resource consent activity, issue of a section 224(c) certificate for a subdivision consent or authorisation of a service connection, whichever is first. An invoice can be issued earlier at your request. Council may also issue an invoice, at its discretion, if it considers the development is already utilising Council infrastructure for which DCs are being required.

Development contribution assessment summary

Development Contributions Summary		Application Ref: RMA/2022/163								
Customer Name		Assessment								
Project Address		Ngāi Tahu Development Holdings Limited								
Assessment Date		320 Shands Road & 637 Main South Road								
		3/02/2022								
Activity	Catchment	Existing HUE	Proposed HUE	Net Increase to HUE Demand	Discount	Chargeable HUE	HUE Rate (incl GST)	DC Charge (incl GST)	Reduction (incl GST)	Net DC Charge (incl GST)
		A	B	C	D	E	F	G	H	I
Network Infrastructure										
Water Supply	West	2.00	44.00	42.00	0.00%	42.00	\$1,849.24	\$77,668.08	\$0.00	\$77,668.08
Wastewater Collection	West	2.00	44.00	42.00	0.00%	42.00	\$3,332.19	\$139,951.98	\$0.00	\$139,951.98
Wastewater Treatment & Disposal	Christchurch	2.00	44.00	42.00	0.00%	42.00	\$1,075.65	\$45,177.30	\$0.00	\$45,177.30
Stormwater & Flood Protection	Halswell	2.00	44.00	42.00	96.00%	1.68	\$15,489.90	\$26,023.03	\$0.00	\$26,023.03
Road Network	Grow th	2.00	44.00	42.00	0.00%	42.00	\$3,863.84	\$162,281.28	\$0.00	\$162,281.28
Active Travel	Metro Zone	2.00	44.00	42.00	0.00%	42.00	\$979.46	\$41,137.32	\$0.00	\$41,137.32
Public Transport	Metro Zone	2.00	44.00	42.00	0.00%	42.00	\$553.63	\$23,252.46	\$0.00	\$23,252.46
Community Infrastructure	District Wide	2.00	44.00	42.00	0.00%	42.00	\$988.43	\$41,514.06	\$0.00	\$41,514.06
Total Network & Community Infrastructure								\$557,005.51		\$557,005.51
Reserves										
Regional Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Garden & Heritage Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Sports Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Neighbourhood Parks	Grow th	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Total Reserves								\$0.00		\$0.00
								GST 15%		\$72,652.89
Total Development Contribution										\$557,005.51

Where both a resource consent and building consent are required as part of the same development, a development contribution (DC) assessment will be undertaken for both consents. However the applicant need only pay for one assessment. As a result, the Council will only invoice in accordance with either the assessment on the resource consent or the assessment on the building consent, whichever is the lower of the two (after any corrections or reassessments undertaken in accordance with the DCP).

The DC assessment is valid for 24 months from the date the assessment is issued (usually with the consent). If the original assessment expires before payment is made, reassessment of the DCs required will be carried out at the same time the invoice is generated.

Reassessments will incorporate any increases to the development contribution requirement in line with the Producers Price Index (PPI) as described in Parts 2.9 and A.7.3 of the DCP. PPI adjustments will incorporate all years between the original application and the time the reassessment is carried out.

Reconsiderations and objections

Under section 199A of the Local Government Act 2002 you can request that the Council reconsider the required DC on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the Council incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the Council has recorded or used it when requiring a development contribution, was incomplete or contained errors.

A Request for Reconsideration form must be lodged with Council within 10 working days of receiving this DC Notice.

Under section 199C of the Local Government Act 2002 you can object to the assessed DC requirement on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the territorial authority incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the territorial authority has recorded or used it when requiring a development contribution, was incomplete or contained errors.

An Objection to DCs form must be lodged with the Council within 15 working days of receiving this DC Notice or a reconsidered assessment. A deposit of \$1,000.00 will be required to lodge an objection.

A form to request a reconsideration or lodge an objection can be found on our website.

To request an invoice please contact a Development Contributions Assessor by phone on (03) 941-8999 or email developmentcontributions@ccc.govt.nz. Once an invoice has been issued payment is required within 30 days. Please quote the project number with all correspondence.

Further information regarding development contributions can be found on our website www.ccc.govt.nz or by contacting a Development Contributions Assessor on (03) 941-8999.

Payments to Council

If any payments to Council are to be made through internet banking please email the details to resourceconsentapplications@ccc.govt.nz and a tax invoice will be raised. The internet banking details are:

Bank: *Bank of New Zealand*
 Account Name: *Christchurch City Council*
 Account Number: *02 0800 0044765 003*

The information you need to enter to help us identify your payment will be specified at the bottom of the invoice (i.e. Particulars, Code and Reference details).

Please note that all payments will be credited to our account on the next business day. Any payment made without the details above may take some time to be lodged against the correct account.

Please email resourceconsentapplications@ccc.govt.nz to notify us when you have made payment.

Council Site Characteristics Information

The Councils Site Characteristics Information on this site is as follows:

City Plan Other	A restricted rural water supply only is available to this property. On a restricted rural supply you can apply for up to 3 units of water (1 unit = a maximum of 1000 litres per day). The minimum supply available is 1 unit and the maximum is 3 units, although this is dependant on water availability as determined by Council. The cost of connection to this system is \$1400. Please contact the customer centre on 941 8666 to confirm the capacity for new connections.
City Plan Other	The conditions of supply of water are set out in the Christchurch City Council Water Supply, Wastewater & Stormwater Bylaw (2014), refer to www.ccc.govt.nz .
Community Board	Property located in Halswell-Hornby-Riccarton Community Board.
District Plan	Property or part of property affected by setback rules that apply to some activities near specified electricity lines.
District Plan Zone	Property or part of property within the Industrial Heavy Zone which is operative.
Earthquake Related	Some properties have experienced land damage and considerable settlement during the sequence of Canterbury earthquakes. While land in the green zone is still generally considered suitable for residential construction, houses in some areas will need more robust foundations or site foundation design where foundation repairs or rebuilding are required. Most properties have been assigned a technical category. Details of the MBIE guidance can be found at www.building.govt.nz/
ECan Requirement	ECan holds indicative information on liquefaction hazard in the Christchurch area. Information on liquefaction can be found on the ECan website at www.ecan.govt.nz/liq or by calling ECan customer services on Ph 03 353 9007. The Christchurch City Council may require site-specific investigations before granting future subdivision or building consent for the property, depending on the liquefaction potential of the area that the property is in.
Ecan Requirement	There may be objectives, policies or rules in a regional plan or a regional bylaw that regulate land use and activities on this site. Please direct enquiries to Canterbury Regional Council (Environment Canterbury).
Electoral Ward	Property located in Hornby Electoral Ward
Flooding Related	Stormwater drainage to an approved soakage chamber (for roof stormwater only) is a condition of any future building on this site unless it is a known or declared hazardous site.

Flooding Related	This property is not in a tsunami evacuation zone. It is not necessary to evacuate in a long or strong earthquake or during an official Civil Defence tsunami warning. Residents may wish to offer to open their home to family or friends who need to evacuate from a tsunami zone, and should plan with potential guests to do so in advance. More information can be found at https://ccc.govt.nz/services/civil-defence/hazards/tsunami-evacuation-zones-and-routes/
Land Characteristic Other	Land Information New Zealand (LINZ) engaged Tonkin and Taylor to provide a Geotechnical Report on Ground Movements that occurred as a result of the Canterbury Earthquake Sequence. The report indicates this property may have been effected by a degree of earthquake induced subsidence. The report obtained by LINZ can be accessed on their website at https://www.linz.govt.nz/land/surveying/earthquakes/canterbury-earthquakes/information-for-canterbury-surveyors
Land Characteristic Other	This property is located in a limited sewer discharge area. Consultation about sewage flows may be required with the council's trade wastes Unit.
Utility Related	This site is traversed by or is adjacent to high tension overhead power lines and pylons. Minimum clearance distances apply to buildings, structures and trees. It is recommended that Orion be contacted for further information.
Utility Related	This site is traversed by or is adjacent to high tension overhead power lines and pylons. Minimum clearance distances apply to buildings, structures and trees. It is recommended that Transpower be contacted for further information.

Allocated Street Numbers

Street number allocation was not available at time of granting this consent. For any street number allocation enquiries please email streetnumbering@ccc.govt.nz

Future Cancellation of Amalgamation Condition

To cancel the amalgamation condition a document pursuant to section 241(3) of the Resource Management Act 1991 will be required from the Council. Although the execution of such a document is not a subdivision consent the Council will need to be satisfied that similar requirements to a subdivision consent have been met before cancelling the amalgamation condition. There is a fee for this, as per the Subdivisions Fees Schedule.

Lighting in Private Ways

The Council does not require lighting within private ways, nor will it accept the ongoing maintenance or running costs associated with lighting within the private way. Any proposal to light the private way shall include a method of payment of the ongoing costs by the benefiting owners.

Building consent requirements

This subdivision consent has been processed under the Resource Management Act 1991 and relates to planning matters only. You will also need to comply with the requirements of the Building Act 2004. Please contact a Building Consent Officer (941-8999) for advice on the building consent process.

Reported and recommended by: Rachel Cottam, Planner

Date: 10/02/2021

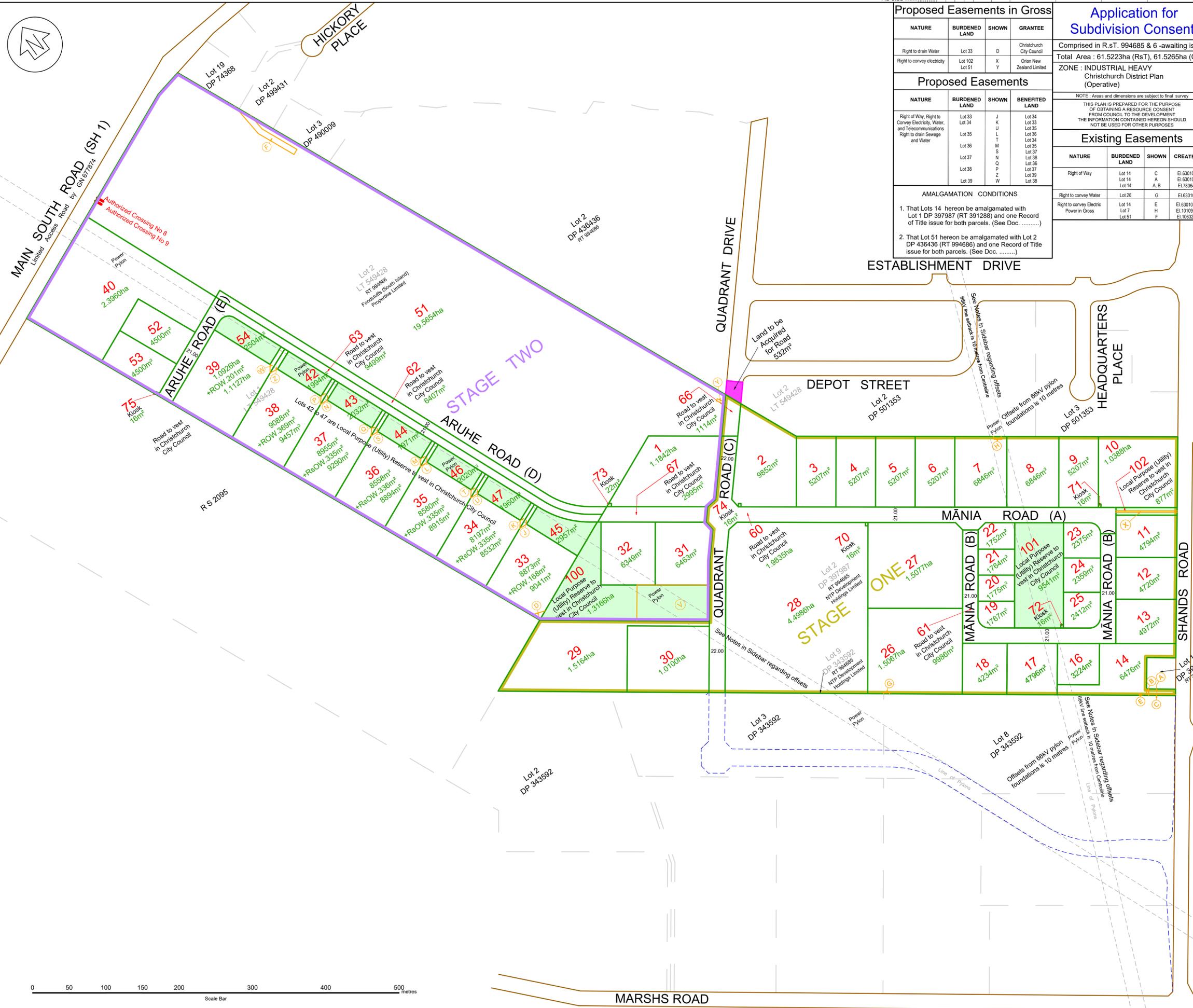
Decision

That the above recommendations be adopted for the reasons outlined in the report.

Delegated officer:



Nathan Harris
Senior Planner
11/02/2022 03:16 PM



Proposed Easements in Gross

NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water	Lot 33	D	Christchurch City Council
Right to convey electricity	Lot 102 Lot 51	X Y	Orion New Zealand Limited

Proposed Easements

NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications	Lot 33 Lot 34 Lot 35 Lot 36 Lot 37 Lot 38 Lot 39	J K L M N O P Q R S T U V W	Lot 34 Lot 33 Lot 35 Lot 36 Lot 34 Lot 35 Lot 37 Lot 38 Lot 39

AMALGAMATION CONDITIONS

- That Lots 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)
- That Lot 51 hereon be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)

Application for Subdivision Consent

Comprised in R.S.T. 994685 & 6 -awaiting issue

Total Area : 61.5223ha (RsT), 61.5265ha (Calc)

ZONE : INDUSTRIAL HEAVY
 Christchurch District Plan (Operative)

NOTE: Areas and dimensions are subject to final survey

THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements

NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14 Lot 14 Lot 14	C A A, B	EI 6301050.7 EI 6301050.9 EI 7806491.5
Right to convey Water	Lot 26	G	EI 6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7 Lot 51	E H F	EI 6301050.11 EI 10109286.1 EI 10632183.2

Notes:

NOTE: Lots 70 to 75 are Electricity Kiosk sites.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

- Offsets from 220kV pylon foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
- Offsets from the 66kV pylon foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the pylon bases where it widens out to be 10 metres from the edges of the pylon foundations.
- A Power Easement will be provided over Lots 30 and 101 if required by Orion.

There is no Lot 15 on this plan.

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	TMCL	-
Proj. Mgr	Jerry Schutte	-	Calibration:	-
Design Review	-	Date	Origin of Levels:	-
Approved	-	Date	Datum:	-

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Proposed Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	1	N



FOR CONSENT

Proposed Easements in Gross

NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water Limited as to Duration until Lot 100 is Vested as Local Purpose (Utility) Reserve in Stage 2	Lot 201	V	Christchurch City Council
Right to convey electricity	Lot 15 Lot 102 Lot 201	R X Y	Orion New Zealand Limited

Application for Subdivision Consent

Comprised in R.T. 994685 -awaiting issue
 Total Area : 41.3168ha (RT), 41.3218ha (Calc)
 ZONE : INDUSTRIAL HEAVY
 Christchurch District Plan (Operative)
 NOTE : Areas and dimensions are subject to final survey
 THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements

NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14 Lot 14	C A A, B	EI.6301050.7 EI.6301050.9 EI.7806491.5
Right to convey Water	Lot 26	G	EI.6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7	E H	EI.6301050.11 EI.10109286.1

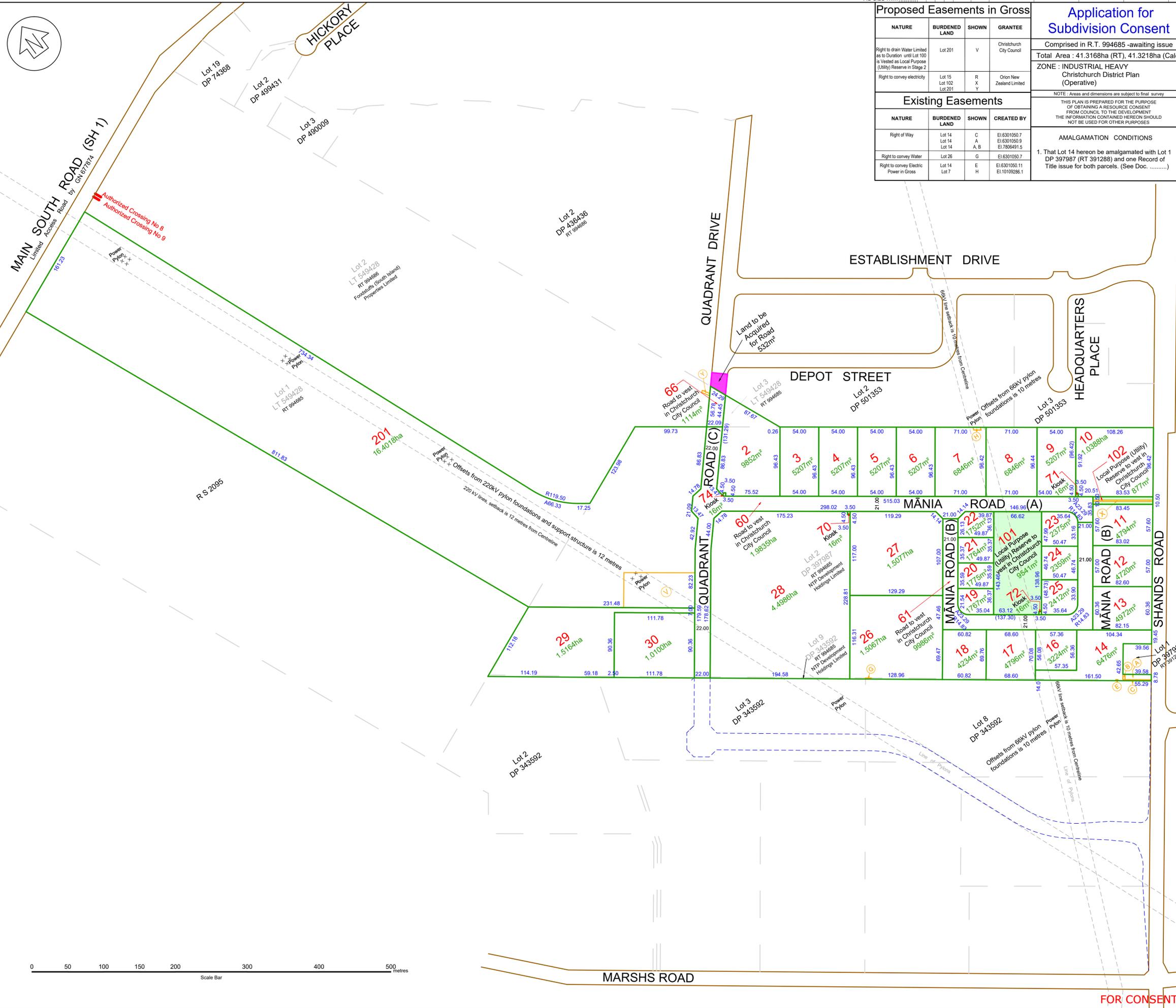
AMALGAMATION CONDITIONS
 1. That Lot 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)

Notes:
 NOTE: Lots 70 to 72 and 74 are Electricity Kiosks.
 Service Easements to be created as Required.
 OFFSET PROVISIONS FOR HIGH VOLTAGE LINES
 1. Offsets from 220kV Pylon Foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
 2. Offsets from 66kV Pylon Foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the Pylon Bases where it widens out to be 10 metres from the edges of the Pylon Bases.
 3. A Power Easement will be provided over Lots 30 and 101 if required by Orion.
 There is no Lot 15 on this plan.

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1 (St 2); enlarge Lot 74; Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Design Review		Date	Calibration:	Origin of Levels:
Approved		Date	Datum:	

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	STAGE One Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 & 3 LT 549428.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	2	N



FOR CONSENT

Proposed Easements in Gross			
NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water	Lot 33	D	Christchurch City Council
Proposed Easements			
NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications	Lot 33	J	Lot 34
Right to drain Sewage and Water	Lot 35	L	Lot 35
	Lot 36	M	Lot 34
	Lot 37	S	Lot 35
	Lot 38	N	Lot 38
	Lot 38	Q	Lot 36
	Lot 38	P	Lot 37
	Lot 39	Z	Lot 39
	Lot 39	W	Lot 38
AMALGAMATION CONDITIONS			
2. That Lot 51 hereon be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)			
Application for Subdivision Consent			
Comprised in Pts R.s.T. 994685 & 6 -awaiting issue			
Total Area : 36.6073ha (RsT), 36.6065ha (Calc)			
ZONE : INDUSTRIAL HEAVY Christchurch District Plan (Operative)			
NOTE: Areas and dimensions are subject to final survey			
THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES			
Existing Easements			
NATURE	BURDENED LAND	SHOWN	CREATED BY
Right to convey Electric Power in Gross	Lot 51	F Y	EI.10632183.2 See Stage One
Existing Easements to be Surrendered			
NATURE	SERVIENT TENEMENT	SHOWN	CREATED BY
Right to drain Water in Gross	Lot 100	V	See Stage One

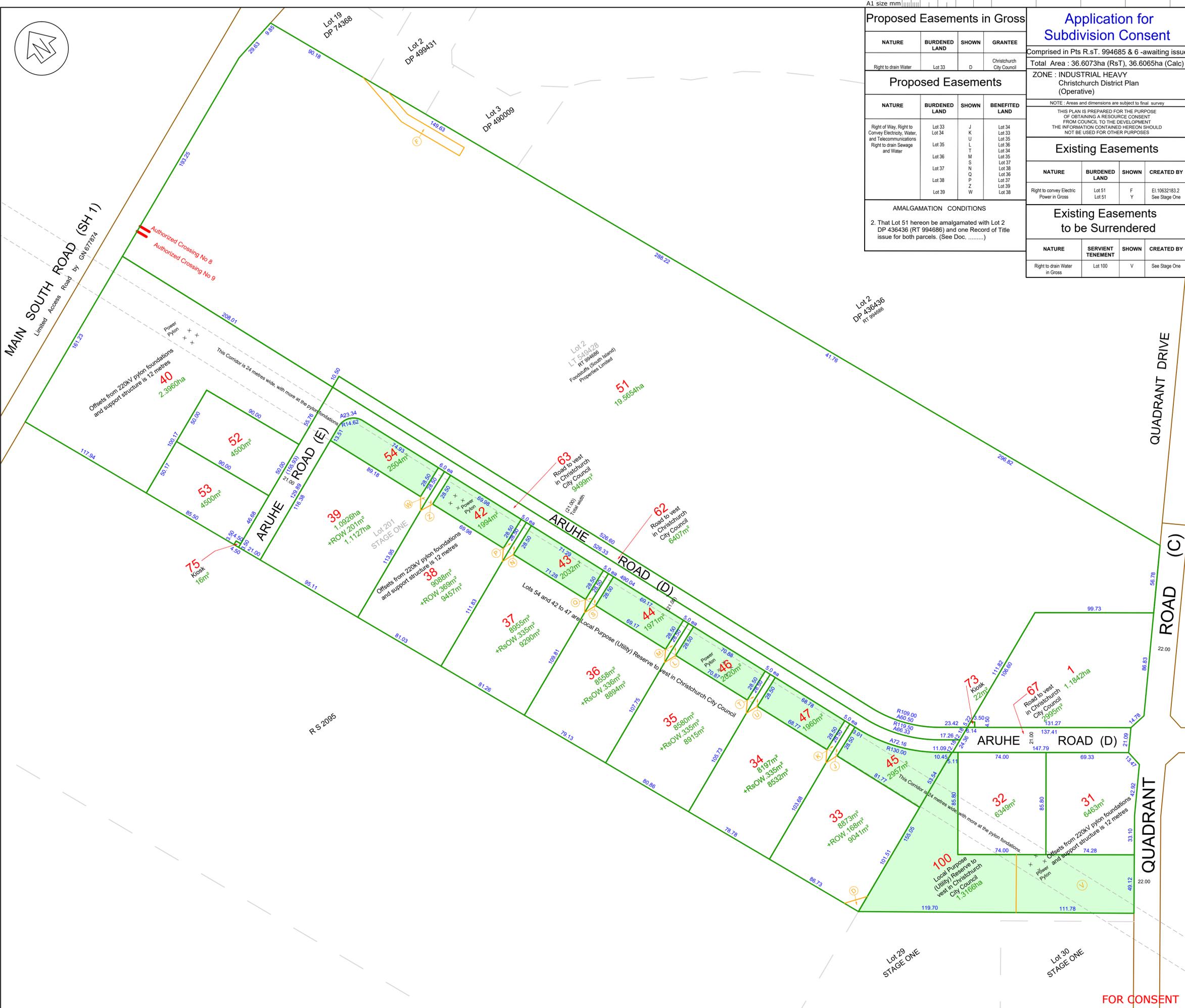
Notes:

NOTE: Lots 73 and 75 are Electricity Kiosks.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

1. Offsets from 220kV Pylon Foundations and Support Structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the Pylon Bases and Support Structures where it widens out to be 12 metres from the edge of the said features.



Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 15 - 17.	rksq	5.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Jerry Schutte	18.11.2019	Calibration:	Mt Pleasant 2000
Design Review			Origin of Levels:	
Approved			Datum:	

Client: **NGĀI TAHU Property**

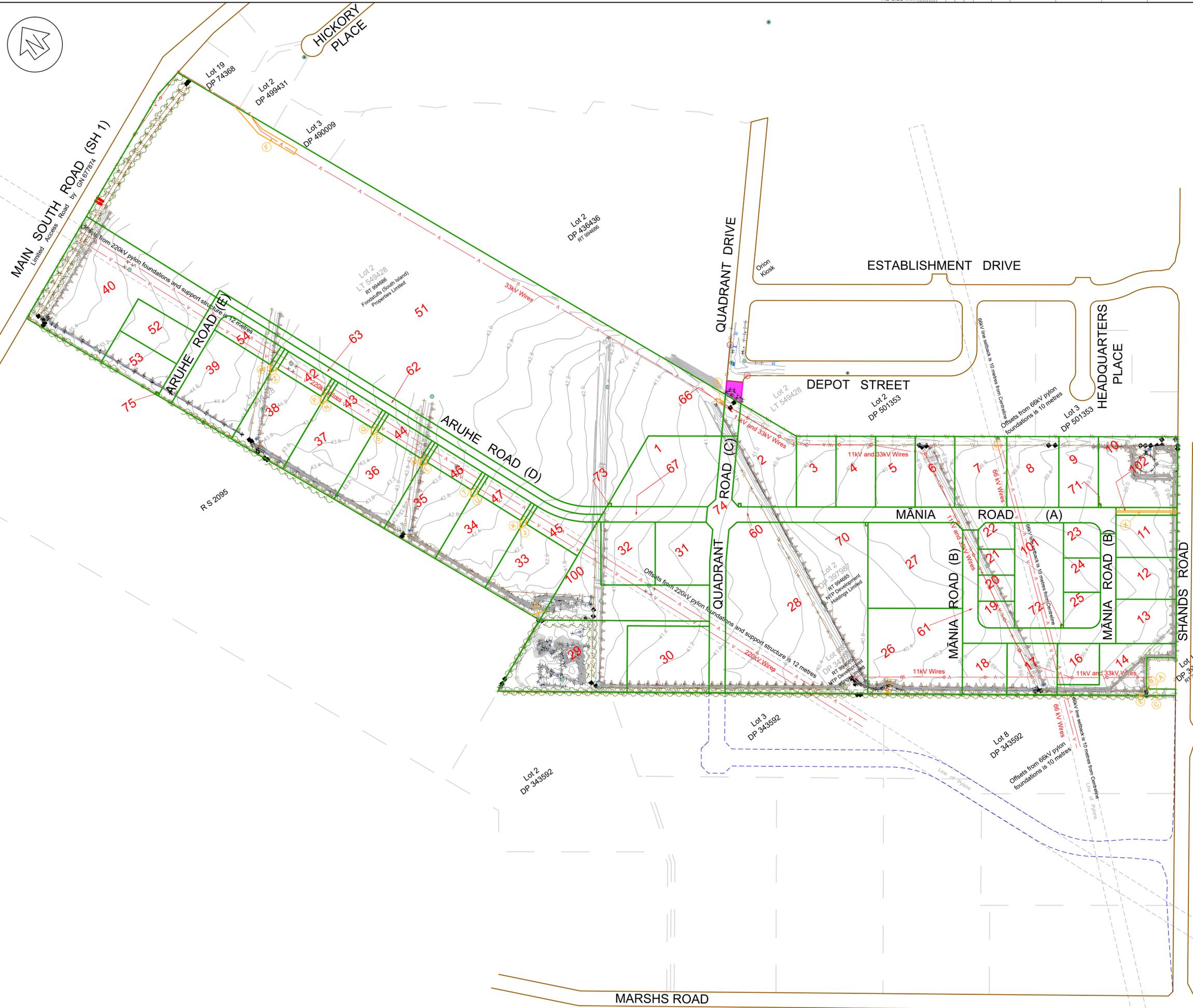
Project Title: **NTPDHL Industrial Park**
320 Shands Road & 637 Main South Road

Drawing Title: **STAGE Two Subdivision of Lot 2 LT 549428 and Lot 201 Stage One**

Scales: 1:1500 [A1] 1:5000 [A3]

Project No.	Set No.	Sht No.	Rev.
442038	C1	3	N

eliot sinclair



Notes:

Rev.	Description	Drawn	Date
J	Add Lots 46, 47; add Leg-ins Lots 34, 35, 36 & 37	rksg	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428; arcs Lots 19,23,25	rksg	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksg	13.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksg	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksg	19.8.2021
F	Add Kiosk Sites	rksg	13.12.2019

Designed	Name	Date	Surveyed:	Survey Date:
	TMCL	-	M.Oates & M.Petty	Apr. Aug 2019
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Drng. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	CDD
Design Review		Date	Origin of Levels:	B87T (BM0380)
Approved		Date	Capped in grass berm	Chr Foremans/Halswell Jctn Rds
			R.L.42.188m	Datum: CDD

Client: **NGĀI TAHU Property**

Project Title: **NTPDHL Industrial Park
320 Shands Road & 637 Main South Road**

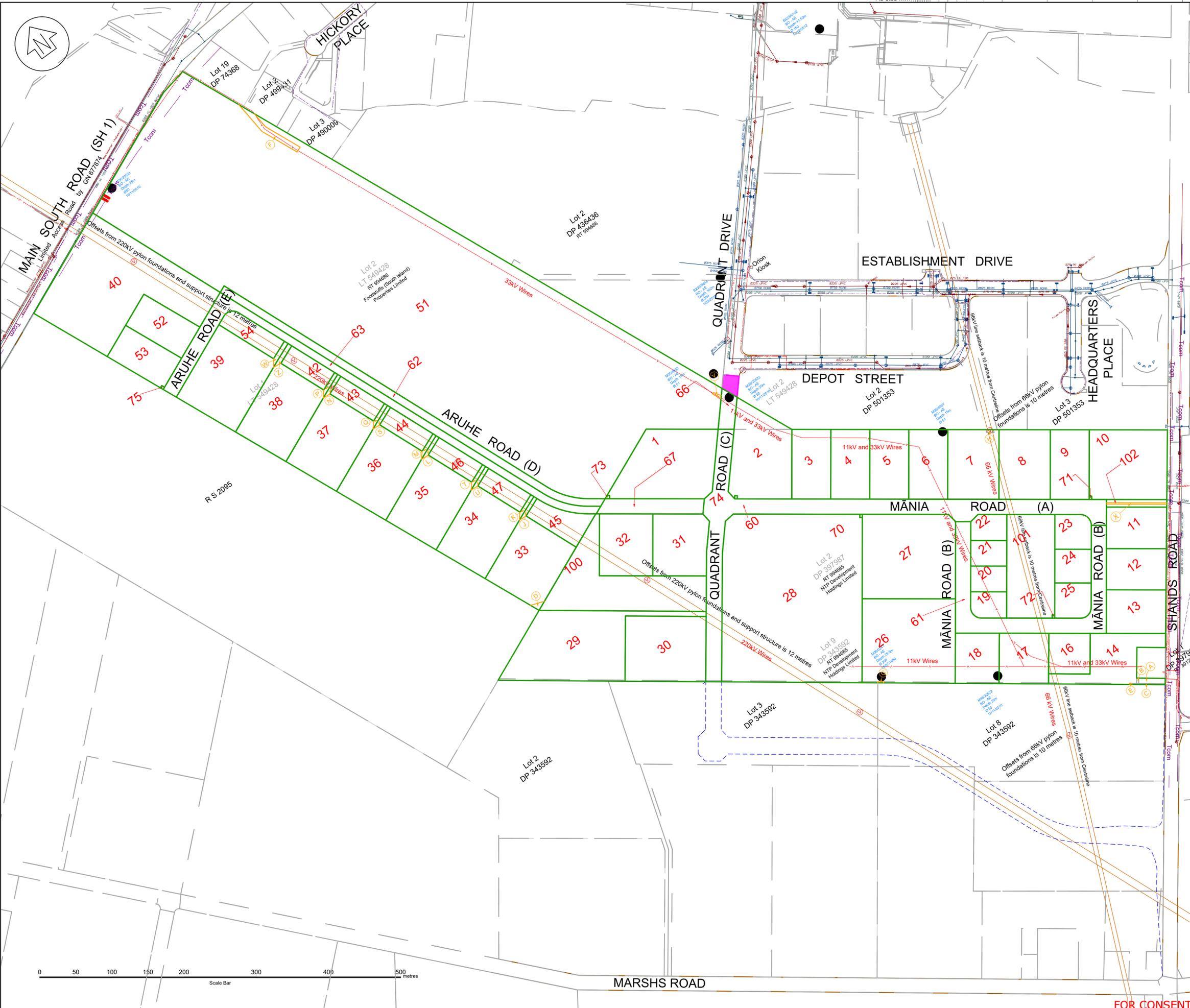
Drawing Title: **Topographical Details for
Proposed Subdivision of 320 Shands Rd etc.**

Scales: **1:2500 [A1] 1:5000 [A3]**

Project No.	Set No.	Sht No.	Rev.
442038	C1	4	N



FOR CONSENT

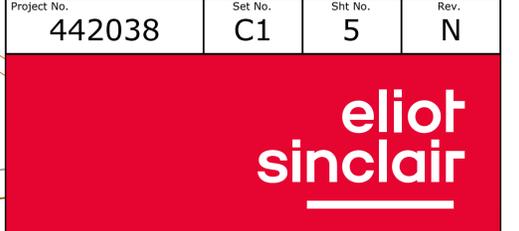


Notes:

Rev.	Description	Drawn	Date
J	Add Lots 46, 47; Add Leg-ins Lots 34, 35, 36 & 37	rksg	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksg	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksg	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksg	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9	rksg	19.8.2021
F	Add Kiosk Sites	rksg	13.12.2019

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	M.Oates & M.Petty	Apr. Aug 2019
Drng. Chk	Bruce Sinclair	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Jerry Schutte		Mt Pleasant 2000	Calibration: CDD
Design Review		Date	Origin of Levels:	B87T (BM0380)
Approved		Date	Capped in grass berm	Cnr Foremans/Halswell Jctn Rds
			R.L.42.188m	Datum: CDD

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Existing Services for Proposed Subdivision of 320 Shands Rd etc.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	5	N



FOR CONSENT



Notes:

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Rev.	Description	Drawn	Date
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
D	Correct Bdy Lot 2 and Lot 2 DP 501353	rksq	3.12.2019
E	Road/Lot 28 amended 614.45m from Shands Rd	rksq	9.12.2019
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Dr. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	
Design Review		Date	Origin of Levels:	
Approved		Date	Datum:	

Client	NGĀI TAHU Property			
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road			
Drawing Title	Aerial Photo Prop. Subdn of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428			
Scales	1:2500 [A1] 1:5000 [A3]			
Project No.	Set No.	Sht No.	Rev.	
442038	C1	6	N	



Report / Decision on a Non-notified Subdivision Consent Application

Sections 95A / 95B and 104 and 104C

Application Number:	RMA/2022/163
Applicant:	Ngai Tahu Development Holdings Limited
Site address:	320 Shands Road and 637 Main South Road
Legal Description:	Lots 1-3 LT 549428, Lot 2 DP 397987 and Lot 9 DP 343592
Zoning:	Industrial Heavy
Overlays and map notations:	Christchurch International Airport Protection Surfaces overlay, 33kV Electricity Lines, 66kV Electricity Distribution Lines, 220kV National Grid
Activity Status - subdivision:	Restricted Discretionary
Activity Status - land use:	Restricted Discretionary
Activity Status - NESCS:	Restricted Discretionary
Description of Application:	42 lot fee simple subdivision and associated earthworks.

New Application to allow for reassessment of Development Contributions

Subdivision consent RMA/2020/1200 was granted on 21st December 2020 for this development, however due to a reduction in Development Contributions under the Development Contributions Policy 2021 the applicant is seeking reassessment by way of lodging this application. The application is not materially different to that considered under the original consent, and subsequent variations to that consent (RMA/2020/1200 A to C).

The proposal

This application is to undertake a 42 lot stage industrial subdivision with associated earthworks, roading, infrastructure and utility reserves.

The key elements of the subdivision proposal are described below:

Subdivision:

- This subdivision proposal is to create 42 industrial lots and a 20 ha balance land (Lot 51). Minimum lot sizes ranges from 1752m² to 4ha;
- The subdivision is to occur in two stages;
- Six lots for kiosks are proposed;
- Six allotments are proposed to be vested as roads;
- Proposed collector road Lot 66 will be connecting to Quadrant Drive in this application. A cost share agreement between the applicant and neighbouring property Calder Stewart has been established to create this connection.
- Ten allotments are proposed for Local Purpose (Utility) Reserves;
- Most of the allotments will have access to roads within the proposed subdivision layout;
- An easement in gross for draining water is proposed within the Lot 33;
- Lot 28 is proposed to have onsite stormwater treatment for all hardstand areas. The remainder of the site will be disposing stormwater in an integrated manner and into Council's network;
- The site contains electricity distribution and national grid transmission lines

Earthworks and NES consent:

- The site was found to be contaminated and classified as G3 landfill sites, G5 waste disposal to land, B2 electrical transformers, B4 power stations, A10 pesticide bulk storage, I release of hazardous substances. Known contaminants include Arsenic, heavy metals, PAH, SVOCs, and asbestos. As such, the subdivision requires resource consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES). This concerning the subdivision component as well as disturbing land for earthwork purposes.

- The proposed subdivision will result in bulk earthworks of a maximum cut of 195,000m³ and a maximum fill of 95,000m³.

In regard to the application, I note the following:

- The application site is located within the South West Hornby Outline Development Plan (ODP);
- Regional consent for construction phase stormwater is required to be obtained; and
- The application site has been recently granted an earthworks consent (RMA/2019/2581) to realign irrigation piping. The effects were considered to be less than minor and erosion and sediment control conditions were imposed.

A site visit was undertaken (from the road/footpath) on the 18th August 2020 under the previous resource consent RMA/2020/1200.

Description of site and existing environment

The application site and surrounding environment are described in section 2 of the AEE submitted with the application.

Relevant rules and activity status

Christchurch District Plan

The site is zoned Industrial Heavy.

Land use rules

The proposal requires land use consent for a restricted discretionary activity under the following rule(s):

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
8.9.2.3 RD1	8.9.2.1 P1 a. Earthworks volume and depth b. Depth of earthworks c. Earthworks gradient	The proposed earthworks will exceed the 1000m ³ maximum volume in Table 9) – 290,000m ³ is proposed. The proposed earthworks will exceed the 0.6m maximum depth by 4.5m.	8.9.4 Matters for discretion: 8.9.4.1 - Nuisance 8.9.4.2 - Resources and assets (versatile soils) 8.9.4.3 - Land stability 8.9.4.6 - Amenity	8.9.1 a. - Must not be publicly notified
16.5.4.1.3 RD3	n/a	Any development within the area shown as 'rural wastewater irrigation area' on the outline development plan in Appendix 16.8.8 is classified as Restricted Discretionary Activity until: i. The full southern spine road between Main South Road and Shands Road (Marked as 'C' on the outline development plan) has been constructed and is open to the public; ii. B. Capacity upgrades have commenced at the following intersections: A. Intersection of the southern spine road and	16.7.3.9.4 – Roading and access	Any application arising from this rule shall not be publicly notified.

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>Shands Road (marked as 'A' on outline development plan in Appendix 16.8.8)</p> <p>B. Intersection of the northern spine road and Shands Road (marked as 'B' on outline development plan in Appendix 16.8.8).</p> <p>The application is proposing development (industrial activities after the completion of the subdivision) prior to the full southern spine (to the extent shown in the ODP).</p>		

Subdivision rules

The proposal requires subdivision consent for a restricted discretionary activity under the following rule(s):

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
8.5.1.2 C4	n/a	The subdivision to create allotments for access, utilities, roads and reserves is classified as a controlled activity.	8.7.3	8.4.1.1
8.5.1.3 RD2	8.6.10 South West Hornby Area Outline Development Plan.	<p>Any subdivision within the area shown as "rural wastewater irrigation area" on the outline development plan at Chapter 16 Appendix 16.8.8. for the Industrial Heavy Zone (South West Hornby) shall not occur until the following works have been undertaken:</p> <p>i. The construction and opening for traffic of the full southern spine road between Main South Road and Shands Road (marked as 'C') on the outline development plan; and</p> <p>ii. the commencement of the physical construction works for capacity upgrades at both the following intersections –</p> <p>A. the intersection of the southern spine road and Shands Road (marked as 'A' on the outline development plan); and</p> <p>B. the intersection of the northern spine road and</p>	8.7.4, 8.7.5 and 8.8.3	8.4.1.1

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>Shands Road (marked as 'B' on the outline development plan).</p> <p>The proposal does not comply with 8.6.10(a)(i) as the construction of Road C has not yet been open to traffic at the time of applying for consent and upgrades to Intersection B has not yet commenced. Therefore, this activity is a restricted discretionary activity¹.</p>		
8.5.1.3 RD2	8.6.8 Wastewater disposal	The proposed wastewater disposal does not comply as no wastewater capacity certificate was provided in the application.	8.7.4 - General matters 8.8.6 - Servicing	8.4.1.1
8.5.1.3 RD5	n/a	<p>Any subdivision within the corridor 37 metres of the centre line of a 220kV National grid transmission line is classified as a Restricted Discretionary Activity.</p> <p>The application site has national grid transmission lines located within the site.</p>	8.7.4 and 8.8.6.i	8.4.1.1.
8.5.1.3 RD6	n/a	<p>Any subdivision within 32 metres of the centreline of a 66kV electricity distribution line and 24 metres of the centreline of a 33kV electricity distribution line is classified as a Restricted Discretionary Activity.</p> <p>The application site has these distribution lines located within the site.</p>	8.7.4 and 8.8.6.8i	8.4.1.1.

Rule 8.4.1.1 specifies that any application for a controlled or restricted discretionary subdivision consent shall not be publicly or limited notified (except in relation to restricted discretionary applications seeking access on to a State Highway). This provision does not apply as the application contains land use non-compliances which do not have any restrictions on the notification decision.

National Environmental Standard

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) controls subdivision of land and soil disturbance where an activity on the Hazardous Activities and Industries List (HAIL) is being carried out or is more likely than not to have been carried out.

In this case it is more likely than not that a HAIL activity is being or has been undertaken on the site. The applicant has submitted a detailed site investigation (DSI) stating that the soil contamination exceeds the applicable standard. Pursuant to Regulation 10(2) a restricted discretionary activity resource consent is required, with Council reserving discretion over the adequacy of the detailed site investigation, the suitability of the land for the activity, the approach to remediation, the adequacy of the site management plan, the transport,

¹ The relevant rules in the ODP state that development must not occur on this site until Intersections A and B have been upgraded. It is have noted that intersection A has been upgraded, however intersection B has not.

disposal and tracking of soil, the requirements for and conditions of a financial bond, the timing and nature of review conditions and the duration of the consent.

Effects on the environment and adversely affected persons [Sections 95D, 95E and 104(1)(a)]

Subdivision

As a restricted discretionary activity the assessment of the effects of the subdivision is limited to the matters over which the Council has limited its discretion outlined in Chapter 8 of the Christchurch District Plan.

In my opinion the effects of this proposal relate to subdivision design, servicing, road design and modelling, network utilities and reserve sensitivity, earthworks and health of the land.

Subdivision design

The relevant matters of discretion for the subdivision application are listed in Rules 8.7.3 and 8.7.4. The matters of discretion assess the design of the subdivision including but not limited to;

- Roading and accesses to proposed allotments and how they correlate with the adjoining transport networks;
- Servicing and infrastructure proposed and whether they are appropriate;
- Open spaces and reserves proposed and whether any natural and cultural values are established/existing on site; and
- Whether the subdivision design accords with the relevant ODP.

I will be discussing this in more detail below.

Subdivision Design and Outline Development Plan

The development creates non-compliances as outlined above which require assessment of Rules 8.7.4, 8.7.5, 8.8.3 and 16.7.3.9.4 in relation to subdivision design and the relevant Outline Development Plan. These non-compliances include developing prior to the spine road being open to the public and intersection upgrades have occurred. Regardless of the non-compliances, there is a broad discretion to consider a wide range of subdivision and ODP matters for any large scale industrial subdivision application.

The application is within the South West Hornby Outline Development which has been outlined earlier in this report. I will further discuss transport effects in my assessment.

In terms of design, I consider that the proposal is broadly consistent with the ODP layout and the matters of discretion. My reasoning is as follows:

- The proposed allotments are of a sufficient size and dimension anticipated for the Industrial Heavy zone;
- The surrounding environment is zoned industrial (either Industrial Heavy or Industrial General Zone) therefore the site design is considered to be compatible with the adjoining subdivision and land use activities;
- The proposed local purpose (utility) reserves have been proposed for stormwater conveyance and they are considered to be sufficiently designed for their purpose;
- The design of the application provides integration and connection within the site as well as to adjoining properties via the proposed collector road and additional local roads;
- The servicing proposed below is not considered to disadvantage adjoining neighbouring properties. I consider that the subdivision does not preclude or discourage development in another part of the outline development plan;
- The application will be complying with the key structural elements indicated within its site (collector road of Quadrant Drive to be extended). The design will also connect with the spine road once this has been constructed (which is detailed further below).

Overall I consider the proposal supports a comprehensive and integrated approach to the development of the South West Hornby Industrial Area.

Stormwater

The applicant is proposing the following for stormwater servicing:

- All future roof stormwater discharges will be via onsite soakage pits which have capacity to detain and discharge all rainfall run off up to and including a 2% AEP critical duration storm. A consent notice is proposed as the design of the roof soakage pits will be the responsibility of individual lot owners and will require approval at the building consent process;

- The development's stormwater network will have capacity to convey a 1 in 5 critical duration rainfall event;
- It is proposed all lots (except Lot 28) and external roading will discharge to one of the two stormwater management areas within the application site (Lots 100 and 101). Lot 100 will contain a swale which provides primary treatment prior to discharging the soakage basin. Lot 101 will contain forebays (as a primary treatment) which will be discharged to the soakage basin. The basins have been designed to treat rainfall runoff generated by first flush and any exceedances will be diverted to the detention basin and discharged via an underlying rapid soakage trench;
- Stage: The basin in Lot 101 will be constructed and vested to Council while Lot 100's basin will be partially constructed and kept in private ownership with an easement in gross. Stage 2 will complete the basins in Lot 100 which will then vest in CCC and the easement in gross will be surrendered;
- It has been assumed that 50% of each lot will contain impervious hardstand and will discharge to the external stormwater network;
- A consent notice is proposed that Lots 1 – 27 and 29 – 40 and 52-53 require their hardstand stormwater to be reticulated to the connection provided;
- All allotments (excluding Lot 28) and proposed roads are to be in accordance with Council's global discharge consent;
- Lot 28 is proposed to have its own onsite treatment for its hardstand and attenuation. Their onsite treatment of hardstand stormwater and attenuation for the 2% AEP critical duration storm;
- The applicant has proposed that a new easement in favour of Council over Lot 33 is established. This is to enable overland flow from adjoining land to continue to cross the site;

The proposed stormwater servicing has been reviewed by Council's stormwater planning engineer Brian Norton. He has commented:

- The basins provide the minimum above ground detention storage required by the Waterways Wetlands and Drainage Guide.
- The basins are considered to be functional however it is recommended that the basins are deepened to soften the edged and widen the berms. The appearance can also be softened by landscaping once constructed.

I accept Mr Norton assessment and recommended conditions. The applicant has accepted these conditions and they form part of the application. I consider the effects of the stormwater servicing to be **less than minor**.

Wastewater

The applicant has not provided a wastewater capacity certificate with the application. The application has been assessed by Council's Team leader for Three Waters Asset Planning Michele McDonald. Ms McDonald does not consider that the servicing of this development will disadvantage other adjoining developments as a result. Ms McDonald has proposed conditions which the applicant has accepted. I adopt Ms McDonald's assessment and recommendations.

I consider the effects on wastewater servicing to be **less than minor**.

Water supply

Specialist input has been obtained from Council's Team leader for Three Waters Asset Planning Michele McDonald. Ms McDonald considers that the proposed water supply servicing would not have a negative impact on adjoining neighbouring sites in regard to further development of the surrounding environment. Ms McDonald has proposed water supply conditions which the applicant has accepted. Overall I consider the effects of servicing (in regard to water supply) are **less than minor**.

Reserves

In regard to open space, the proposed local purpose (utility) have been accepted by Council's Park Team and Three Waters. Council's Open Space Planner Peter Barnes has recommended conditions in regard to the vesting of the reserves, and standard park conditions for green spaces, establishment periods, street trees, final completion and handover. I consider the proposed open spaces to be appropriate.

Transport – Road Design & Modelling

The proposed transport network within the development includes:

- Five internal roads which will be vested to Council. These roads will have a legal width of 21 metres and all roads will facilitate two-way traffic.
- An extension of Quadrant Drive (collector road) which will contain a legal width of 22m and a carriage way of 14m.

The development is being proposed prior to the construction/establishment of the spine road which requires an assessment of the transport networks effects. The applicant has provided a modelling report which assesses the transport network effects created from the proposal. This has been reviewed by Council's Transport Engineers Andy Milne and Weng-Kei Chen who have also assessed the proposed roading design. Mr Milne has provided a memo and updated comments. I have summarised Mr Milne and Mr Chen comments:

- The subdivision and consequent development rely on the establishment of a road connection to the c-spine road and its connection to Shands Road to create a safe and efficient transport network for the locality.
- Due to there being no bus route within close proximity to the site, connections to public transport services will be required to be improved in the near future.
- There are a number of uncertainties in the modelling which include; the true impact of CSM2 on changes in traffic volumes on the surrounding road network, form and timing of the Calder's link and intersection upgrade at Sir James Wattie Drive/ Shands Road, and future route assignment of traffic in the area.
- It has been accepted that a footpath could be created when Lot 40 and 51 are further developed or whether neighbouring site RS 2095 is further developed. The application is proposing to provide a road linkage to RS 2095 which could eventually connect to the Main South Road in the future.
- Connaught Drive/Halswell Road intersection is to be upgraded in the future and once the c-spine road is constructed, any effects on the levels of service will be reduced.
- A shared footpath is required within Lot 102 connecting to Shands Road. This is to provide pedestrian and cycle way connections from Shands Road into the proposed subdivision. This will assist in providing alternative transport options for users of the development.
- A safety audit will be imposed as a condition to be assessed at the engineering design phase. The roading design will be assessed in detail at the engineering design phase.
- Mr Milne and Mr Chen have accepted the applicant's volunteered condition *"No development is permitted on Lots 1 to 40 and 52-53 until such time as the following road connections (legal and physical) are made to the application site:*

i. To Quadrant Drive to the north."

Overall Mr Milne and Mr Chen have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent. I accept and adopt their comments and recommendations. The applicant has adopted these recommendations.

I consider that the roading network proposed is generally appropriate having regard to the District Plan District Plan provisions. I note that the collector road is aligned with the requirements of the ODP. If the C Spine Road was fully developed in the ODP area, it would not materially improve the overall performance of the road network because it would not connect to Main South Road. I consider the effects of the road design and modelling to be **less than minor**.

Other conditions

The matters of control in Rule 8.7.4 cover a wide range of matters required to be addressed to ensure a subdivision proposal is appropriate. Conditions have been proposed for the following items:

- Staging;
- Engineering general conditions and the requirement of engineering plans;
- Street lighting;
- Telecommunications and energy supply;
- Easement conditions;
- Road naming;
- Amalgamations; and
- GST forms to be completed at the s224 certification

These conditions generally ensure that the subdivision is designed and constructed to an appropriate standard and in line with the Infrastructure Design Standard (IDS) and Construction Standard Specifications (CSS). They help to secure the right form of land tenure for industrial titles and public land and assets (such as easements, reserves and amalgamation). Many of these are also administration conditions to ensure processes up to the s224 certification are implemented correctly. The applicant has not raised any concerns in regard to these conditions and they reflect the proposal put forward by them.

Network utilities and reverse sensitivity effects

The application site contains the following electricity transmission lines:

- 220kV National Grid Transmission Lines (will be running through proposed Lots 28, 30, 32, 40, 42-47, 100(Local purpose utility reserves) 63 and 66 (proposed legal road));
- 66kV Electricity Distribution Lines (will be running through proposed Lots 7,8, 16,17 and 101 (Local purpose utility reserve); and
- 33kV Electricity Distribution Lines (to run through proposed Lots 7, 8, 16 and 101)²

Under Rule 8.8.6.i, consultation with Transpower and Orion are required. The relevant matters of discretion to assessed electricity transmission and reverse sensitivity effects are listed below:

- The extent to which the subdivision design mitigates adverse effects, including reverse sensitivity to nearby National Grid or electricity distribution lines shown on the planning maps, Radio New Zealand Limited's Gebbies Pass Road facilities or other strategic infrastructure³;
- Outside the Central City, the extent to which the subdivision design and construction allows for earthworks, buildings and structures to comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).⁴

The applicant has consulted with the two companies and I have summarised their comments below.

Transpower

Transpower have provided the following comments:

"The proposed activity on the local purpose reserves to be vested in Council represents the greatest risks to Transpower in terms of activity on those parcels and future access to the line support towers. Conditions have been proposed to maintain access through these parcels of land. If the consent holder follows the proposed conditions (recommended by Transpower) it enables the reserves to be handed to the Council in a state that preserves access."

Transpower have recommended the conditions in regard to earthworks, mobile plant clearance, and safe separation distances for people working on site, stormwater, proposed vegetation, construction management plan and consent notices. The consent notices proposed are in regard to electrical safe distances, building setbacks and control of vegetation within the transmission line areas. The applicant has accepted these draft conditions proposed by Transpower.

Orion

Orion has provided the following comments regarding their infrastructure:

- The application site has an existing 11kV line through the site. The line is proposed to be installed underground which forms part of the Orion connection agreement to provide power for the subdivision.
- The 66kV electricity distribution line is classified as strategic infrastructure and plays a critical role in providing electricity to Christchurch. There is potential for two new pole support structures to be installed on proposed Lot 16. This will be further discussed at later date with the applicant.
- Orion also owns and operates the existing Shands Road substation (330 Shands Road).
- There is a need for sufficient protection of the distribution lines to ensure the on-going operation, development and maintenance of these lines and their associated support structures.
- The Applicant has volunteered a Consent Notice to apply to Lots 7, 8, 16, 17 and Lot 101 where the 66kV electricity distribution line traverses to require any buildings to be built outside of the required setback;
- The application makes reference to kiosk title sites to be transferred to Orion (proposed lots 70-75 as shown on the Application Plans). Please note final locations of kiosk sites will be determined through the electrical design and connection agreement process.
- For completeness, as part of the standard Orion connection agreement process to provide power for the subdivision Orion will consider the on-going operation, maintenance and access requirements for the existing 66kV electricity distribution line. This will include the registration of an electrical easement in gross in favour of Orion New Zealand Limited for the existing 66kV electricity distribution line over proposed lots 7, 18, 16, 17, 22 and 101. This easement will extend 10 metres out from the centreline of the electricity distribution line and 10 metres from the outer edge of any support structure foundation and subject to Orion's standard terms and conditions.

² The 33kV distribution line is proposed to be relocated underground as a result of this subdivision.

³ Refer to Clause 8.7.4.1.g of the District Plan.

⁴ Refer to Clause 8.7.4.1.q. of the District Plan.

To facilitate the on-going operation, maintenance and access to these lines and their associated support structures, Orion requests that the resource consent is imposed with the following condition and advice notes to reflect the following:

“The detailed design for the new road over proposed Lot 60 and 61 in the vicinity of the existing 66kV electricity distribution lines shall demonstrate compliance with the New Zealand Electrical Code of Practice for Electrical Safe Clearance Distances 34:2001 (NZECP34:2001).

Advice notes:

Vegetation to be planted around the electricity distribution lines shall be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

Any construction works including the operation of mobile machinery in the vicinity of the electricity distribution lines must comply with the NZECP34:2001

The detailed design for the stormwater basin to be constructed on Lot 101 under the existing 66kV electricity distribution lines shall comply with the NZECP34:2001

Subject to the requested condition and advice notes being imposed on the resource consent decision then Orion has no objection to this subdivision proposal. The applicant have accepted the draft conditions and advice notes proposed.

Conclusion

Based on the information provided and the above requested conditions and advice notes being included at the end of this report, Orion and Transpower have no objection to the proposal. With respect to reverse sensitivity effects, I consider that given the position and scale of the existing 66kV and 220kV electricity and transmission lines and their associated support structures any prospective owner or occupier will be well aware of their presence on the site. On the basis of the above I consider any adverse effects with the proposed works and development within proximity to 66kV and 220kV electricity distribution lines to be **less than minor**.

Earthworks effects

The proposed earthworks create an exceedance of earthworks in Chapter 8.9 of the District Plan. I consider the primary effects relate to nuisance, land stability and amenity.

The applicant has provided the following information regarding the proposed works:

- The proposal includes cutting volumes of 195,000m³ and filling volumes of 95,000m³;
- The maximum depths of cut is proposed 4.5 metres below ground level;
- Earthworks are proposed for the formation of carriageways, service installation, site contouring and filling, filling of areas with uncontrolled fill and the formation of two stormwater management areas.
- Earthworks around the power pylon foundations will be limited to a maximum depth of 250mm within 0-6m from the pylon foundations and a maximum depth of 1.1m within 6-12m of pylon foundations.
- Roads will be cut below the existing ground level and there will be 1 in 7 batter from the road boundary up to the existing ground level inside the Lots. Within the vicinity of the Stage 1 (Lot 101) the sections will be filled so they grade at a minimum slope of 1 in 500 towards the road.
- The existing open drain along the back of Lots 33 to 38 will be cleaned out and infilled. Lot 29 will also be cleared and graded.
- The finished surface of each allotment not requiring filling will be contoured to the level of the road boundary and increased in height to the rear of each site at a minimum grade of 1 in 500, this will ensure site drainage towards carriageways and associated stormwater conveyance infrastructure.
- The sites will be graded to enable allotments to achieve a minimum of 1 in 500 grade towards the road at some point across each lot. In Stage 2, Lots 33 – 39, earthworks are proposed to be kept to a minimum, to work with the topography, while still allowing sites to achieve stormwater flow from the site to enter the swale at Lots 42-47 on their downhill (eastern side).

The proposed works have the potential to create nuisance effects which include dust, sedimentation, erosion, change of drainage patterns, effects on groundwater and surface water in which could affect neighbouring properties, roading networks, waterways and the wider environment. It can also result in land stability issues which further exacerbate these nuisances. I consider that most nuisance effects can be controlled via conditions. The proposed conditions have been accepted by the applicant. Amenity effects are less than minor as the releveling of site provides suitable land for development and will not affect neighbouring properties.

Specialist input has been obtained from Senior Subdivision Engineer Yvonne McDonald. She has made the following comments:

“Earthworks are 195 000m³ cut and 95 000m³ fill, to a maximum cut depth of 4.5m below ground level. The applicant estimates 15 000 m³ of earthworks are needed to address the contaminated material, which will be managed through a Remedial Action Plan. I suggest the conditions from NES be read in conjunction with mine, to avoid double ups and conflicts. I am happy if they are combined. The applicant states earthworks around the power pylons will be restricted in depth and setbacks observed.

These earthworks are to reshape lots, construct roading, install services and create stormwater basins and will be carried out in stages, which the applicant states will help reduce potential erosion, sediment and dust discharges. An Erosion and Sediment Control Plan (ESP) will be provided for acceptance and applied to the works to manage these discharges. I have suggested normal conditions requiring provision of this plan for acceptance before works commence.

Existing and design ground levels have only been provided for stage 1. Lots 33-38 are shown with fill on the southeast corners. The land falls away from this boundary so cross-boundary overland flows shouldn't be affected by this. I have suggested conditions about fill retention, preserving fences and preventing drainage effects downstream.

Filling in lots of up to 1.0m depth on the Shands Rd boundary will require battering to the existing ground level. Currently the land is at or above the legal road so the drainage patterns are not changing significantly. I have suggested a condition that all batters be within the applicants property.

The applicant states historic uncontrolled fill is present in an old alluvial channel and that this and test pits will be re-excavated and compacted to comply with NZS 4431. The applicant has suggested a condition to ensure this. Filling to the existing drain on the south boundary will also be placed in a controlled manner. I have suggested normal fill placement and recording conditions to support this.

Under the geotechnical assessment, it was noted that the channel to the west will require an outfall through the development to preserve overland flow and the applicant has suggested a condition to ensure this. I agree with their proposed condition.

The applicant states a consent for construction phase stormwater will be applied for at a later stage.”

I adopt Ms McDonald's assessment and consider the earthwork effects are **less than minor**.

Health of the land

The application site has been identified as HAIL site including the activities:

- E1 – Asbestos products manufacture or disposal
- G5 – Waste disposal to land

A Detailed Site Investigations (DSI) have been undertaken for the Applicant Eliot Sinclair in 2018 and further investigations in 2020. The reports and soil testing results confirm that contaminants such as asbestos, located within areas of the site are above industrial guideline standards.

A remedial action plan is proposed as a consent condition. Site Validation reporting will also be required to confirm remedial measures have been satisfactorily undertaken as and where relevant.

Specialist input has been obtained from Council's Senior Environmental Health Officer Isobel Stout. Ms Stout has made the following comments:

“This is the problematic land with the vegetable processing water discharge system. It seems it's distributed more than just water. The number of investigations looks to be up to 4 now and all of them have found asbestos fibres at levels above land use standards in soils in relation to the discharge points. The subdivision is therefore restricted discretionary.

At this stage there is no RAP as the staging timetable and actual method of remediation is still unconfirmed. We are being asked to consent the submission of an RAP stage by stage and I am OK with approach. Ultimately the work will have to be done prior to S224 in any case.”

Ms Stout has recommended the following condition:

“A Remedial Action Plan (RAP) shall be prepared by a suitably qualified and experienced practitioner in the assessment and management of contaminated land. The RAP shall be prepared in general accordance with Contaminated Land Management Guidelines, No.1, Ministry for the Environment (revised 2011), and shall

include (but not be limited to) a detailed discussion of the remedial options available and the extent of remedial works required, the methods of validation and the necessary pre-remediation site management procedures (e.g. fencing, warning signs, stormwater diversion, etc), that will avoid, mitigate, or remedy any adverse effects of the remedial works on human health.

At least 10 working days prior to the commencement of the remedial works, the RAP shall be submitted to Council for review and certification that it is within the scope of this consent and it meets the conditions of this consent."

I consider that site validation condition is also required to ensure that the site is appropriate for industrial land use prior to s224 certification being issued. I consider that the effects of contamination are limited to the site and if remedied as proposed by conditions have **less than minor effects**.

Conclusion

The proposed subdivision is generally anticipated within the zone, and I consider that any adverse effects on the environment can be adequately mitigated by the recommended conditions of consent.

The effects of these non-compliances are less than minor and there are no affected parties.

Notification assessment [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notified or limited notification of an application is required.

Public notification

- Step 1. The application does not meet any of the criteria for mandatory notification in section 95A(2).
- Step 2. The application does not meet any of the criteria in section 95(A)(5) precluding public notification. Although Rule 8.4.1.1 a. precludes public notification of the subdivision consent there is no such rule for the land use activity.
- Step 3. There are no rules or NES requiring public notification, and any adverse effects on the environment will be no more than minor (section 95A(8)).
- Step 4. There are no special circumstances that warrant public notification (section 95A(9)).

Limited notification assessment

- Step 1. There are no affected groups or persons as outlined in section 95B(2) and (3).
- Step 2. The application does not meet any of the criteria in section 95B(6) precluding limited notification, as there are no rules precluding it and the application is not for a controlled activity land use consent.
- Step 3. As discussed above, no persons are considered to be affected under section 95E (sections 95B(7) and (8)).
- Step 4. There are no special circumstances that warrant notification to any other persons (section 95B(10)).

Conclusion on notification

There is no requirement for public or limited notification of either the subdivision or land use aspect of this application.

Relevant objectives, policies, rules and other provisions of the District Plan [Section 104(1)(b)(vi)]

Regard must be had to the relevant objectives and policies in the Christchurch District Plan. I consider that the proposal is consistent with the objectives and policies in the District Plan.

Subdivision

The objectives and policies for subdivision and development are focused on connectivity and suitability of subdivision design, preserving amenity/natural features and providing allotments for the anticipated use. The relevant objectives and policies for this application are listed in 8.2.2, 8.2.2.1, 8.2.2.2, 8.2.2.3, 8.2.2.4, 8.2.2.5

8.2.2.6, and 8.2.3, 8.2.3.1, 8.2.3.2, 8.2.3.3, 8.2.3.4 and 8.2.3.5.

The proposed allotments are suitable for the anticipated land use of industrial activity as discussed previously in this report. I consider the design of the subdivision generally meets the requirements of the ODP. I consider the proposal to be consistent with the objectives and policies of Chapter 8.

Transport

Objective 7.2.1 'Integrated transport system for Christchurch District' seeks an integrated transport system that is safe and efficient, responsive to needs, supports communities, reduces dependency on private motor vehicles and promotes the use of public and active transport, and is managed using the one network approach⁵. In this instance, and noting that my discretion is restricted to those matters over which the District Plan specifies, I consider the relevant policies to consist of:

Earthworks

The proposal will facilitate development of the site while ensuring that people and property are protected during, and subsequent to, the works. This is consistent with the relevant policy direction within Chapter 8 'Subdivision, Development and Earthworks' of the District Plan. In particular, the proposal accords with; Objective 8.2.4 'Earthworks' and attendant Policies 8.2.4.1 'Water quality', 8.2.4.3 'Benefits of earthworks', and 8.2.4.4 'Amenity, and Objective 8.2.5 'Earthworks health and safety' and accompanying Policies 8.2.5.1 'Land stability', 8.2.5.2 'Nuisance', 8.2.5.3 'Vehicle movement', and 8.2.5.4 'Earthworks design'.

Conclusion

The proposal is consistent with the objectives and policies of the District Plan.

Relevant provisions of a National Environmental Standard, National Policy Statement, Regional Plan, Regional Policy Statement or Coastal Policy Statement [Section 104(1)(b)]

The NES for Electricity Transmission is relevant to the application as the subdivision contains transmission and distribution lines as outlined in the application. Orion and Transpower have reviewed the proposed subdivision and requested the inclusion of conditions relating to works and building near to the electricity distribution setbacks, which have been accepted by the applicant.

The NES for Assessing and Managing Contaminants in Soil to Protect Human Health is relevant to the application as a HAIL activity is being carried out or is more likely than not to have been carried out on the land. The relevant provisions are discussed in previous sections of this report.

For completeness, I note that the District Plan gives effect to the relevant provisions of higher order instruments referred to in s104(1)(b), including the Regional Policy Statement and Regional Plans. As such, there is no need to specifically address them in this report.

Any other matters which are relevant and reasonably necessary to determine the application [Section 104(1)(c)]

There are no other matters relevant to the consideration of this application.

In this case the proposal is not contrary to the objectives and policies, therefore I am satisfied that issues of precedent or plan integrity do not arise.

Part 2 of the Resource Management Act 1991 [Section 104(1)]

The above considerations are subject to Part 2 of the Act which outlines its purpose and principles.

Taking guidance from recent case law⁶, the District Plan is considered to be the mechanism by which Part 2 is given effect to in the Christchurch District. The Plan has recently been reviewed, and was competently prepared via an independent hearing and decision-making process in a manner that appropriately reflects the provisions of Part 2. Accordingly, no further assessment against Part 2 is considered necessary.

Section 106

s106 Consent authority may refuse subdivision consent in certain circumstances

⁵ This approach considers the transport networks as a whole, noting that effects on the network may extend beyond the immediate vicinity.

⁶ *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316

- (1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—
- (a) there is a significant risk from natural hazards; or
 - (b) (repealed)
 - (c) sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.
- (1A) For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—
- (a) the likelihood of natural hazards occurring (whether individually or in combination); and
 - (b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and
 - (c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

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 - (b) (repealed)
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- (a) the likelihood of natural hazards occurring (whether individually or in combination); and
 - (b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and
 - (c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

This section of the Act is particularly relevant in relation to geotechnical concerns following the Canterbury earthquakes. The land is not identified as being within the Liquefaction Management Area in the Christchurch District Plan and rule 5.5.2a does not apply. The land is Green Zoned, with no technical category assigned to the site.

The applicant has submitted a Natural Hazards Assessment report prepared by Eliot Sinclair and Partners Limited which has been reviewed by Council's Subdivision Engineer Yvonne McDonald.

The methodology of the report included review of the pre-purchase geotechnical report and ground contamination (preliminary and detailed site investigation). The pre-purchase geotechnical report was prepared by Eliot Sinclair and Partners Limited and consisted the following methodology; review of New Zealand Geotechnical Database, Council records, GNS, Canterbury maps GIS, 6 test pits, 21 hand augers and scala penetrometers and supplementary shallow soil testing.

Mrs McDonald has made the following comments:

"Eliot Sinclair undertook a review of a pre-purchase geotechnical report and of the Ground Contamination Assessment on the site. The pre-purchase geotechnical report was based on a desktop review. The Ground Contamination Assessment included the following site investigations: 8 transect test pits to between 0.6m to 2.6m bgl on the old alluvial channel alignment, 21 hand augers and associated Scala penetrometers on the proposed road alignment and limited topsoil depth testing. The hand augers found between 0.3-0.7m topsoil over insitu silts, silty sands and sandy silts to between 1.1-3.1m bgl, determined either by finding gravel or reaching 3.0m depth. Using piezometers, Elliot Sinclair estimate groundwater at between 14-16m bgl.

Eliot Sinclair state that 'In relation to MfE's "Planning and Engineering Guidance for potentially liquefaction prone land", Eliot Sinclair has completed a "Level B" assessment which concludes the site has a "Low" vulnerability to liquefaction where "damage due to liquefaction is unlikely".' I agree with that assessment.

The applicant has provided a section 106 assessment and found that there are no natural hazard risks to preclude development. I agree with this assessment and have no geotechnical conditions to apply to this consent.

The applicant has suggested the following conditions:

- Any areas of uncontrolled fill that are known, or may be found during subdivision construction, should be removed and reinstated with controlled, compacted inert fill materials, generally in accordance with the requirements of NZS4431:1989 as a minimum standard.
- Provision shall be made for secondary flows of stormwater from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.”

Mrs McDonald has included these conditions in her proposed earthwork conditions.

I accept the advice provided to me regarding the risk of natural hazards, and conclude that there are no grounds to refuse consent under section 106(1)(a). In terms of section 106(1)(c) I am satisfied that adequate legal and physical access is provided to each allotment.

Recommendations

Land use Consent

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C, 108 and 108AA of the Resource Management Act 1991, subject to the following condition:
1. The development shall proceed in accordance with the information and plans submitted with the application.
 2. No development is permitted on Lots 1 to 40 and 52-53 until such time as the following road connections (legal and physical) are made to the application site:
 - i. To Quadrant Drive to the north.

Any development on the subject lots must comply with all rules in the District Plan except for 16.5.4.1.3 RD3.

Advice Notes: This consent does not permit urban activities on Lot 51 which are balance lots.

3. All earthworks associated with the creation and formation of the subdivision shall be carried out in accordance with the conditions of subdivision consent.

Subdivision

- (A) That the application be processed on a non-notified basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application be granted pursuant to Sections 104, 104C and 106 of the Resource Management Act 1991, subject to the following conditions imposed pursuant to Sections 108, 108AA and 220 of the Resource Management Act 1991:
1. **Compliance with Application Information**
 - 1.1 The survey plan, when submitted to Council for certification is to be substantially in accordance with the stamped approved application plans prepared by Eliot Sinclair, Project No. 442038 Revision N, and Sheets 1 to 6.
 2. **Staging**
 - 2.1 The subdivision may be carried out in stages in accordance with the stamped approved plans.

2.2 Stages 1 and 2 shall not progress until such time as the following road connections (legal and physical) are made to the application site:

- i. To Quadrant Drive to the north (i.e. over Lots 2 and 3 DP 501353).

3. New Road to Vest

.... 3.1 All roads are to be formed and vested in the Council to the satisfaction of the Subdivision Engineer with underground wiring for electricity supply and telecommunications.

4. Local Purpose (Utility) Reserve land

4.1 Lots 101, 102, 42 to 47, 54 and 100 (As shown in Approved Plan 1) are to vest as Local Purpose (Utility) Reserve, clear of any easements.

Advice Note – A Local Purpose (Utility) Reserve, including any landscape improvements, shall hold no credits towards the final Reserve Development Contributions Assessment

Advice note: Any underground infrastructure across land to be vested as Reserve will require an easement application in compliance with s239, prior to the issuing of s224 certificate. The application should be made to the Consent Planner, at the Consent Holders expense.

5. Engineering General

5.1 Asset Design and Construction

All infrastructure assets to be vested in the Council are to be designed and constructed in accordance with the Christchurch City Council's Infrastructure Design Standard (the IDS) and the Construction Standard Specifications (the CSS).

5.2 Quality Assurance

The design and construction of all assets is to be subject to a project quality system in accordance with Part 3: Quality Assurance of the IDS.

A. Submit a Design Report, Engineering Plans, Erosion and Sedimentation Plans, Environmental Management Plan and Design Certificate complying with clause 3.3.2 to the Subdivision Engineers (Planning Team 1). The Design Report and engineering plans are to provide sufficient detail to confirm compliance with the requirements of the IDS and this consent.

B. Submit a Contract Quality Plan for review by the Council and an Engineer's Review Certificate complying with clause 3.3.3.

Physical works shall not commence until a Council Engineering Officer confirms that the above documentation has been received and accepted.

C. Submit an Engineer's Report and Completion Certificate complying with clause 3.3.4.

An Engineer's Report is a document specific to a project, which describes how the project was managed and administered in compliance with the IDS, the Construction Standard Specifications, the Contract Quality Plan and the resource consent or project brief. It provides background information to the release of the 224(c) certificate.

Note: Part 3 of the IDS sets out the Council's requirements for Quality Assurance. It provides a quality framework within which all assets must be designed and constructed. It also sets out the process for reporting to Council how the works are to be controlled, tested and inspected in order to prove compliance with the relevant standards. It is a requirement of this part of the IDS that certification is provided for design and construction as a pre-requisite for the release of the 224c certificate. The extent of the documentation required should reflect the complexity and/or size of the project.

In addition to the above, all infrastructure is to be designed to resist the effects associated with earthquake induced liquefied soils. All liquefaction hazard mitigation shall be designed for a 1 in 150 year return period serviceability limit seismic design event and a 1 in 500 year return period ultimate limit state seismic design event as defined in NZS1170.5.2004.

5.3 Traffic Management

An approved Traffic Management Plan (TMP) shall be implemented and no works are to commence until such time as the TMP has been installed. The TMP shall be prepared by an STMS accredited person and submitted to and approved by the Christchurch Transport Operation Centre – please refer to www.tmpforchch.co.nz

5.4 *Survey Plan Requirements*

The surveyor is to forward a copy of the title plan and survey plan to the Subdivision Planner (that issued the consent), Resource Consents & Building Policy Unit as soon as the plan has been lodged (or earlier if possible) for checking at Land Information New Zealand for entering into the Council GIS system.

5.5 *Laterals for rear Lots*

All private sewer and stormwater laterals (serving rear lots) shall be installed under a single global Building Consent by a Licensed Certifying Drain Layer and the Code Compliance Certificate forwarded to Council's Subdivision Team as part of the Sec 224c application.

5.6 *CCTV Inspections*

Pipeline CCTV inspections are to be carried out on all gravity pipelines in compliance with the Council Standard Specifications (CSS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/construction-standard-specifications/pipeline-cctv-inspections/>

5.7 *Services As-Built Requirements*

As-Built plans and data shall be provided for all above and below ground infrastructure and private work in compliance with the Infrastructure Design Standards (IDS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/infrastructure-design-standards/as-built-survey-and-data-requirements/>

Note: this includes RAMM and costing data

As-Built Plans are to be provided for any easements in gross over pipelines. The plans are to show the position of the pipelines relative to the easements and boundaries.

6. Water Supply

6.1 The points of water supply for the subdivision shall be the existing DN200 uPVC water main in Quadrant Drive and the existing DN200 AC water main in Shands Road.

6.2 The water supply shall be designed by a suitably qualified person in accordance with the Infrastructure Design Standard and in accordance with the NZ Fire Service Fire Fighting Water Supplies Code of Practice NZS 4509:2008 to the satisfaction of the Water & Wastewater Asset Planning Team. Engineering drawings supported by hydraulic model outputs shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water & Waste Asset Planning Team prior to the commencement of any physical work.

6.3 With the exception of the water main connection between Lot 60 (Road to Vest) and through Lot 102 (Local Purpose (Utility) Reserve to vest in Christchurch City Council) to the point of supply in Shands road, all water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.4 All water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.5 Water mains shall be extended along the full length of roads to vest and be terminated with temporary hydrants as per the requirements of the Infrastructure Design Standard.

6.6 The construction of Council vested water infrastructure shall be carried out by a Council approved water supply installer at the expense of the applicant.

6.7 Lots 1-40, 52 and 53 shall be served with a water supply to their boundary. Submains shall be installed to 1m past each lot boundary.

7. Sewer

7.1 Lots 1-40, 52 and 53 shall be serviced by a Local Pressure Sewer System (LPSS) designed in accordance with Council's Infrastructure Design Standards and Construction Standard Specifications. Engineering drawings supported by hydraulic calculations shall be sent to the Subdivisions Engineer

for Engineering Acceptance by the Three Water and Waste Planning Team prior to the commencement of any physical work

- 7.2 The approved sanitary sewer outfall for Lots 1-40, 52 and 53 shall be the DN225 uPVC gravity sewer main in Quadrant Drive.
- 7.3 The consent holder shall put in place measures to enable the initial operation of the local pressure sewer system within and from the subdivision during the build phase, including (but not limited to) ensuring self-cleansing flow and limiting sewage retention time within the system when the design number of pressure sewer tanks are not yet in operation. These measures shall be reported to the Subdivisions Engineer prior to seeking section 224(c) certification.
- 7.4 With the exception of Lot 51, each lot shall have a Boundary Kit located within the legal road. The pressure lateral from the Boundary Kit must extend at least 600mm into the net site of each lot.

Advice note: A sewer connection for Lot 51 shall not be available until wastewater capacity has been confirmed by Council and such a connection may not be approved for discharge to the sewer outfall identified for Lot 1 to Lot 40, 52 & 53.

- 7.5 Installation of the pressure sewer mains and boundary kits shall be carried out by a Council Authorised Drainlayer (Pressure Sewer Reticulation).
- 7.6 Provision will be made for odour treatment and corrosion protection at the discharge point in Quadrant Drive in accordance with Council's Infrastructure Design Standards, Construction Standard Specification and operational requirements. Engineering drawings supported by design calculations and specifications for the odour treatment facility and corrosion protection works shall be sent to the Subdivision Engineer for Engineering Acceptance prior to the commencement of any physical work.

Advice Note: Council may reach an agreement with the Developer to establish the odour treatment facility approximately 600 metres downstream at PS82 in Produce Place in order to streamline future operations.

- 7.7 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2):

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

8. Sewer (Stage 2 – Lot 51 only)

- 8.1 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lot 51:

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

9. Stormwater

9.1 The stormwater management and mitigation system to be constructed under this application shall rely on stormwater treatment and disposal to ground via infiltration. The system shall be comprised of channels, sumps, pipes, swales, first flush soil adsorption basins, detention basins and/or rapid infiltration systems. In addition to the below conditions, the system shall meet the requirements of the CCC Waterways, Wetlands and Drainage Guide (WWDG), the Infrastructure Design Standard (IDS 2018) and the Construction Standard Specifications (CSS 2018).

9.2 The consent holder shall demonstrate that authorisation for operational and construction phase stormwater discharge has been obtained from the relevant authority.

9.3 Stormwater generated from roofs of all buildings shall be collected via a sealed stormwater system separated from all other stormwater and discharged into an onsite rapid soakage system.

9.4 The following consent notice shall be registered on the title of all allotments Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2) to ensure ongoing compliance with consent conditions:

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

9.5 Stormwater generated from all roads and hardstanding areas within all allotments (except Lot 28 and Lot 51) shall be collected via channels, sumps, pipes or swales and discharged into first flush soil adsorption basins and detention/rapid soakage facilities located within allotment to be vested in Christchurch City Council as Local Purpose (Utility) Reserve. The first flush soil adsorption basins shall:

- a. Utilise a vegetated swale, sediment forebay or alternative approved pre-treatment system;
- b. Be designed to hold (at minimum) the volume of stormwater runoff generated from the first 25mm of rain falling on roading and hardstand areas within the development site;
- c. Utilise 150mm depth of treatment media consisting of sand/topsoil mixture to be specified by Council engineers during engineering design phase;
- d. Utilise a 250mm depth of 19mm concrete "pre-mix" or other approved drainage layer mix below the treatment media;
- e. Discharge to free-draining gravels after passing through the treatment media and drainage layers. If free draining gravels are not encountered at the design depth, unsuitable material shall be excavated and backfilled with free-draining washed rock;
- f. Have average batter slopes of 1 vertical in 4 horizontal, or flatter, and;
- g. Be planted with an approved grass species on the basin floor and an approved grass mix and/or approved tree and shrub plantings on the batter slope.

- 9.6 Stormwater generated in excess of the first flush volume shall discharge via flow splitter or upstream weir into separate detention/rapid soakage basins. The detention/rapid soakage basins shall:
- a. Be designed to hold the volume required to capture and dispose of the critical 2 percent annual exceedance probability storm, but not less than the stormwater volume generated from a 10% AEP, 18-hour storm, minus the first flush volume;
 - b. Utilise either rapid soakage chambers/trenches designed in accordance with WWDG Section 6.5 or a fully gravelled base extending down to natural free draining gravels;
 - c. Have average batter slopes of 1 vertical in 4 horizontal or flatter;
 - d. Be planted with an approved grass mix and/or approved tree and shrub plantings on the basin floor and batter slopes.
- 9.7 The consent holder shall confirm, by Detailed Site Investigation and Validation Report (if required) that soil contaminants within all Local Purpose (Utility) Reserves containing stormwater basins or swales are below ANZECC SQG-High Sediment Quality guidelines.
- 9.8 A landscape buffer of average width 5 metres is to be established between all stormwater basins and all allotments. The Council engineer may, at their discretion, allow some variance to this buffer width and planting requirements.
- 9.9 The stormwater management and mitigation system shall be designed to ensure complete capture, retention and disposal of all stormwater runoff from the site for all rainfall events up to and including the critical two percent annual exceedance probability storm. This will require internal reticulation and conveyance to meet Council's inundation standards as specified in the WWDG. The conveyance system shall be designed to ensure that even for events where the critical peak stormwater runoff flow rate occurs that all resulting runoff reaches the first flush treatment system. A combination of primary and secondary conveyance systems may be used to ensure this level of service is achieved.
- 9.10 The primary stormwater reticulation network shall be designed to convey (at minimum) the critical twenty percent annual exceedance probability storm event. No flooding of private property shall occur during the critical ten percent annual exceedance probability storm event and no flooding of buildings shall occur during the critical two percent annual exceedance probability storm event.
- 9.11 Prior to the commencement of engineering works, the consent holder shall demonstrate, by means of appropriate site testing (by a suitably qualified professional) that the 'design' soakage rates for the infiltration systems are able to be achieved within the stormwater disposal sites. Measured soakage rates, determined by test, shall be reduced by a factor of three (or more) in the final design of the soakage system.
- 9.12 At the time of excavation of the actual infiltration site/s during the construction phase of the development, the consent holder shall confirm that the initial assumptions of infiltration rates, derived from the preliminary testing, are appropriate. Subject to this investigation, the Council may review these conditions pursuant to Section 128 of the Act to require the consent holder to alter the engineering design.
- 9.13 The proposed soakage areas are not to be used for major construction sedimentation control sites. The sediment control management plan for the development works shall be designed such that any sediment discharge or accumulation within the proposed soakage areas is avoided. Care is to be taken during construction to ensure that the natural permeability of the soils is not compromised by heavy machinery use or other construction activities.
- 9.14 Upon practical completion of the first flush soil adsorption basins and prior to issuance of the s224c certificate, hydraulic conductivity testing of all installations shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 75mm-300mm per hour, with no single test result less than 50mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.

- 9.15 To ensure compliance with the above conditions, the value of restoration of all first flush soil adsorption basins shall be determined and agreed by the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit. The consent holder shall bond that sum with the Council prior to the issuance of the Section 224(c) Certificate.
- 9.16 Safe and adequate access to surface water mitigation facilities for maintenance and sediment removal shall be provided and designed in accordance with WWDG Sections 6.8 & 6.9.
- 9.17 The consent holder shall provide easements in gross over all stormwater infrastructure located outside of legal road or utility reserve areas to be vested with Council.
- 9.18 The consent holder shall submit an Engineering Design Report to the CCC 3 Waters and Waste Planning Unit and Resource Consents Unit for acceptance. The Engineering Design report shall demonstrate how the design will meet all of the applicable standards and shall contain all of the plans, specifications and calculations for the design and construction of all stormwater infrastructure and mitigation systems.
- 9.19 The designer of the surface water management system shall provide a report which identifies all overland flow paths proposed in the event of infiltration system failure or storm events that exceed the capacity of the system. All overland stormwater flow paths are to be identified and protected by easement if required.
- 9.20 The consent holder shall provide as-built plans of the surface water management systems and facilities and confirm that they have been constructed in accordance with the approved plans and comply with the IDS, particular Part 3: Quality Assurance and Part 12: As-Builts.
- 9.21 A landscape plan of the proposed stormwater facilities and their buffers shall be submitted for acceptance by the Council's Resource Consents Unit. Landscaping required by this condition is to be carried out in accordance with the approved plan at the consent holder's expense. The consent holder shall maintain all planting for a minimum of 24 months from the time of issue of the Section 224 Certificate.
- 9.22 The consent holder shall operate and maintain surface water mitigation facilities and infrastructure to vest into Council for a Defects Liability Period of 24 months following the issue of the Section 224(c) certificate in accordance with the provisions of NZS 3910:2013.
- 9.23 No more than 90 days prior to the expiry of the Defects Liability Period, hydraulic conductivity testing of the soil adsorption basin(s) shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 50mm-300mm per hour, with no single test result less than 30mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.
- 9.24 A Maintenance and Operations manual for all surface water management and mitigation facilities shall be provided and shall form part of the Resource Consents and 3 Waters Planning Unit acceptance. This manual is to include a description of the activity, the design assumptions, maintenance schedule and monitoring requirements.

10. Stormwater (Lot 28 - Stage 1 Only)

- 10.1 Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.
- 10.2 The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual

exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDG to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

11. Access Construction Standards

- 11.1 The access formation shall be designed and constructed in accordance with the CCC Infrastructure Design Standard. Physical works shall not commence until a Council engineering officer confirms that the Design Report, Plans and Design Certificate complying with clause 3.3.1 of the IDS and the Contract Quality Plan and Engineer's Review Certificate complying with clause 3.3.2 has been received by Council.

Advice note: This condition is relevant to Lots 29, 33-39

12. Street Lighting

- 12.1 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

13. Engineering Plans

- 13.1 Engineering plans for the construction of the new road(s), shared accesses, street lighting, drainage, sediment control, water supply, earthworks, landscaping and tree planting shall be lodged with the Subdivisions Engineer and approved prior to the commencement of any physical works. All works are to be in accordance with Council's Infrastructure Design Standard.

- 13.2 Engineering works are to be installed in accordance with the approved plans.

14. Transport

- 14.1 A 2.5 metre wide shared path is to be constructed on Lot 102 and shall link to the path on Shands Road.
- 14.2 Road safety audits shall be undertaken as part of the detailed engineering design report and post-construction by a suitably qualified independent traffic engineer.

Advice note: There may be changes required to the road design as a result of the recommendations of the road safety audit.

- 14.3 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

15. Greenspace

Reserve Landscape Plans

- 15.1 Landscape Plans for Reserves (Lots 101 and 102 (Stage 1) 42, 43, 44, 45, 46, 47, 54 100 (Stage 2)) are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.

Advice Note – Where the Consent Holder has applied to vest assets as detailed on Accepted Landscape Plans, but the Asset and Network Unit (Parks) have not agreed to the value of the assets being credited against the Reserve Development Contributions or to reimburse the value of the assets

to the Consent Holder, then the Consent Holder may vest the assets at their own expense, with the agreement of the Council's Parks Unit.

- 15.2 The Landscape Plans are to provide sufficient detail to confirm compliance with the requirements of the IDS, the CSS, and the WWDG: 2003. All landscaping required by this condition is to be carried out in accordance with the accepted plan(s) at the Consent Holder's expense, unless otherwise agreed.
 - 15.3 The Consent holder shall maintain plants on Reserve Lots 42, 43, 44, 45, 46, 47, 54, 100, 101 and 102 for the **24 months** Establishment Period (Defects Maintenance), until a final inspection and acceptance of the landscaping by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes (current version).
 - 15.4 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of plants/trees and the works undertaken during the Establishment Period. The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version)).
 - 15.5 The relevant Council Unit staff may carry out an inspection of the reserve plants/trees after the first **6-12 months**, and a final inspection will be carried out at the end of the **24 month** Establishment Period (Defects Maintenance). Where it is not possible to determine the condition of plants/trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined.
 - 15.6 The Consent holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to replace and replant all plants/trees on reserves. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **12/24 months** for the replacement planting(s), as required (e.g. in a situation where 50% or more of the landscaping is not accepted). The bond shall be released after the plants and trees have been inspected and Accepted by the relevant Council Parks Operations staff.
 - 15.7 Any replacement plantings and establishment period required due to plants/trees not being accepted are to be carried out at the Consent Holder's expense.
- Street Tree Landscape Plans
- 15.8 Street tree landscape plans are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.
 - 15.9 The Landscape Plan(s) are to provide sufficient detail to confirm compliance with the requirements of the IDS (current version) and the CSS (current version).
 - 15.10 The Consent Holder shall maintain the street trees for the **24 months** Establishment Period (Defects Maintenance) until final inspection and acceptance of the trees by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes.
 - 15.11 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of the trees and the works undertaken during the Establishment Period (Defects Maintenance). The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested. (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version)).
 - 15.12 The Team Leader Road Amenity & Asset Protection or his/her nominee may carry out an inspection of the trees after the first **6-12 months** and a final inspection will be carried out at the end of the **24 month** Establishment Period. Where it is not possible to determine the condition of trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined).
 - 15.13 The Consent Holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to supply, replant and establish all street trees. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **24 months** for the trees(s), if required (e.g. in a situation where 50% or more of the trees are not accepted). The bond shall be released after the trees have been accepted by the Team Leader Road Amenity & Asset Protection or his/her nominee.

- 15.14 Any replacement plantings and establishment period required due to trees not being accepted are to be carried out at the Consent Holder's expense.

Final Completion / Handover (Reserves and Street Trees)

- 15.15 The Consent Holder shall submit, the required completion documentation in accordance with IDS Part 2:2.12 Completion of Land Development Works and the Quality Assurance System to provide evidence that the work is completed in accordance with the agreed standards and conditions of this consent. This is to be submitted, on completion of the **24 month** Establishment Period, prior to final inspection for formal handover to Council and release of the Establishment Bond.

As – Builts (Reserves and Street Trees)

- 15.16 The Consent Holder shall submit As-Built plans for any landscape improvements on land to be vested as reserve and for any street trees, in accordance with IDS, Part 12 As-Builts records and validated **before the s224 certificate is issued.**

16. Electricity Transmission (66kV lines)

- 16.1 The detailed design for the new road over proposed Lot 60 and 61 in the vicinity of the existing 66kV electricity distribution lines shall demonstrate compliance with the New Zealand Electrical Code of Practice for Electrical Safe Clearance Distances 34:2001 (NZECP34:2001).

- 16.2 The following consent notice shall be registered on the titles of Lots 7, 8, 16 and 17 to ensure ongoing compliance with consent conditions:

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kV overhead powerlines and 10m from the tower foundations.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

17. Electricity Transmission (220kV transmission line)

Earthworks

- 17.1 No excavation or disturbance of the land around the National Grid Towers; shall:
- Exceed a depth greater than 300mm within 6 metres of the outer edge of the visible foundations of the tower; or
 - Exceed a depth greater than 3 metres between 6 metres and 12 metres of the outer edge of the visible foundation of the tower; or
 - Create an unstable batter.
- 17.2 No fill or material shall be stockpiled or deposited under the National Grid transmission lines so that the conductor to ground clearance is reduced to less than 8.0m.
- 17.3 The consent holder must ensure that the discharge of dust and/or particulate matter from the activities authorised by this consent do not create any dust hazard or nuisance to the National Grid transmission lines, including support structures. A dust hazard or nuisance will occur if;
- There is visible evidence of suspended solids in the air; and/or
 - There is visible evidence of suspended solids traceable from a dust source (from the site works) settling on the transmission lines and/or support structures.

Mobile Plant

- 17.4 All machinery and mobile plant operated in association with the works shall maintain a minimum clearance distance of 4 metres from the National Grid transmission lines at all times.
- 17.5 A warning sign must be clearly displayed at the operator position on any mobile plant stating **"WARNING, KEEP 4M MINIMUM CLEARANCE FROM TRANSMISSION LINES AT ALL TIMES"**.
Important Note: For specific clearance restrictions, refer to the **BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020.**

People

- 17.6 All people working on site, must maintain a safe separation distance of at least 6 metres between themselves (including any tools they are carrying) and the conductors (wires) of any National Grid transmission lines at all times.

Stormwater

- 17.7 The consent holder must ensure that changes to the stormwater drainage patterns and runoff characteristics arising from the works do not result in adverse effects on the foundations of any National Grid support structure.

Vegetation planted prior to s.224(c) approval

- 17.8 Any proposed new trees or vegetation within 12m either side of the centreline of the National Grid transmission must not exceed 2 metres in height at full maturity; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.9 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line, must be setback sufficiently to ensure the tree cannot fall within 4 m of the lines; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Construction Management Plan

- 17.10 Prior to the commencement of physical site works, the consent holder shall prepare and submit to the Council for information, a Construction Management Plan (CMP) to ensure the protection of the National Grid transmission lines. The CMP must be given to Transpower NZ Ltd for its certification at least 20 working days prior to being submitted to the Council.

Note: The CMP should be sent to Transpower at transmission.corridor@transpower.co.nz

- 17.11 The CMP must include the following (but is not limited to):
- a) The name, experience and qualifications of the person/s nominated by the consent holder to supervise the implementation of, and adherence to, the CMP.
 - b) Details of the contractor's liability insurance held to cover any costs, direct or indirect, associated with any damage to the National Grid transmission lines, directly or indirectly caused by works undertaken to give effect to this consent.
 - c) Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34: 2001) or any subsequent revision of the code; and the recommendations within the Electrical Clearance Report, "BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020"; including (but not limited to) those relating to:
 - i) Excavation and Construction near Towers (Section 2);
 - ii) Ground to conductor clearances (Section 4);
 - iii) Mobile Plant to conductor clearances (Section 5); and
 - iv) People to conductor clearances (Section 9).
 - d) Details of any areas that are "out of bounds" during construction and/or areas within which additional management measures are required, such as fencing off, entry and exit hurdles, maximum height limits, or where a safety observer may be required (a safety observer will be at the consent holder's cost.
 - e) Demonstrate how the effects of dust (including any other material potentially resulting from construction activities able to cause material damage beyond normal wear and tear) on the transmission lines will be managed;
 - f) Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures.
 - g) Details of proposed contractor training for those working near the transmission lines.

- 17.12 All works/activities are to be undertaken in accordance with the approved CMP.

Consent Notice

- 17.13 All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

- 17.14 No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.
- 17.15 No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.
- 17.16 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.17 Conditions 17.13-16 (inclusive) shall be the subject of a consent notice on the title for proposed Lots 28, 30, 31, 32 and 33 – 40 (inclusive).

Advice notes:

- a) *Transpower NZ Ltd has a right to access its existing assets under s23 of the Electricity Act 1992. Lot design must not preclude or obstruct this right of access. It is an offence under s163(f) Electricity Act to intentionally obstruct any person in the performance of any duty or in doing any work that the person has the lawful authority to do under s23 of the Electricity Act 1992.*
- b) *For specific clearance restrictions, refer to the “BROMLEY-ISLINGTON-A, Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020”.*
- c) *Lots 42-45 (inclusive) and Lot 100 to be vested in the Christchurch City Council as Local Purpose (Utility) Reserve must not be developed with amenity planting or fences, structures, etc. that prevent Transpower obtaining practical access to transmission line support towers.*
- d) *Access to Transpower’s transmission line support tower #67 of the BRY-ISL-A located on Lot 100 must be maintained free of restriction from the east – via the new road extension south of Quadrant Drive and to the south of Lots 31 & 32.*

18. Earthworks

- 18.1 Earthworks shall be carried out in accordance with approved plans 19 to 23.

The earthworks and construction work shall be under the control of a nominated and suitably qualified engineer.

- 18.2 The Erosion and Sediment Control Plan shall show the positions of all stockpiles on site. Temporary mounds shall be grassed or covered to prevent erosion until such time as they are removed.

Advice note: Topsoil shall not worked excessively, to protect the integrity of the soil microbes.

- 18.3 All filling and excavation work shall be carried out in accordance with an Environmental Management Plan (EMP) which shall include an Erosion and Sediment Control Plan (ESCP). Unless approved as part of a separate ECan resource consent for stormwater discharge or ECan resource consent for excavation/filling the ESCP will require formal acceptance by Christchurch City Council’s Subdivision Engineer (email to rcmon@ccc.govt.nz) prior to any work starting on site. The ESCP shall be designed by a suitably qualified person and a design certificate (on the Infrastructure Design Standard Part 3: Quality Assurance Appendix IV template <https://www.ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/IDS/IDS-Part-03-Quality-Assurance-V3-September-2016.PDF>) supplied with the ESCP for acceptance at least 5 days prior to the works commencing.

- 18.4 The best practice principles, techniques, inspections and monitoring for erosion and sediment control shall be based on ECan’s Erosion and Sediment Control Toolbox for Canterbury <http://esc Canterbury.co.nz/>. The ESCP shall include (but is not limited to):

- The identification of environmental risks including erosion, sediment and dust control, spills, wastewater overflows, dewatering, and excavation and disposal of material from contaminated sites;
- A site description, i.e. topography, vegetation, soils, etc;
- Details of proposed activities;
- A locality map;

- Drawings showing the site, type and location of sediment control measures, on-site catchment boundaries and off-site sources of runoff;
- Drawings and specifications showing the positions of all proposed mitigation areas with supporting calculations if appropriate;
- Drawings showing the protection of natural assets and habitats;
- A programme of works including a proposed timeframe and completion date;
- Emergency response and contingency management;
- Procedures for compliance with resource consents and permitted activities;
- Environmental monitoring and auditing, including frequency;
- Corrective action, reporting on solutions and update of the EMP;
- Procedures for training and supervising staff in relation to environmental issues;
- Contact details of key personnel responsible for environmental management and compliance.

Note: IDS clause 3.8.2 contains further detail on Environmental Management Plans. The EMP may include the Remedial Action Plan.

- 18.5 The accepted ESCP shall be implemented on site over the construction phase earthworks, and any earthworks for remediation if required. No earthworks shall commence on site until:
- The contractor has received a copy of all resource consents and relevant permitted activity rules controlling this work
 - the ESCP has been installed.
 - an Engineering Completion Certificate (IDS – Part 3, Appendix VII), signed by an appropriately qualified and experienced engineer, is completed and presented to Council. This is to certify that the erosion and sediment control measures have been properly installed in accordance with the accepted EMP.
- 18.6 Dust emissions shall be appropriately managed within the boundary of the property in compliance with the Regional Air Plan. Dust mitigation measures such as water carts or sprinklers shall be used on any exposed areas. The roads to and from the site are to remain tidy at all times.
- 18.7 Notify Christchurch City Council no less than ten working days prior to works commencing, (email to rcmon@ccc.govt.nz) of the earthworks start date and the name and contact details of the site supervisor.
- 18.8 Any change in ground levels shall not cause a ponding or drainage nuisance to neighbouring properties. All batters shall be formed within the applicant's property unless written permission is obtained from the affected landowner.
- 18.9 Any change in ground levels shall not affect the stability of the ground or fences on neighbouring properties.
- 18.10 The fill sites shall be stripped of vegetation and any topsoil prior to filling. The content of fill shall be clean fill.
- 18.11 All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for Earthfill for Residential Purposes NZS 4431:1989. At the completion of the work an Engineers Earthfill Report, including a duly completed certificate in the form of Appendix A of NZS 4431, shall be submitted to Council at rcmon@ccc.govt.nz for all lots within the subdivision that contain filled ground. This report shall detail depths, materials, compaction test results and include as-built plans showing the location and depth of fill and a finished level contour plan.
- 18.12 The consent holder shall submit a report and calculations detailing any filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties. Any retaining wall construction shall be included and certified as part of the Earthfill Report.

Note: Any retaining wall that exceeds 6m² is regarded as a building and requires a separate resource consent if not specifically addressed within the application supporting this consent.

Note: This report may be presented as part of the Design Report for the subdivision works under condition 1 (subdivision design report and QA).

- 18.13 Any areas of uncontrolled fill that are known, or may be found during subdivision construction, shall be removed and reinstated with controlled, compacted inert fill materials, generally in accordance

with the requirements of NZS4431:1989 as a minimum standard. These areas shall be included in the records provided under the Earthfill Report in condition 11.

- 18.14 Provision shall be made for overland stormwater flows from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.

Advice note: This condition is relevant for stages 1 and 2.

- 18.15 All bared surfaces shall be adequately topsoiled and vegetated as soon as possible to limit sediment mobilisation.
- 18.16 Should the Consent Holder cease or abandon work on site for a period longer than 6 weeks, or be required to temporarily halt construction during earthworks, they shall at first take adequate preventative and remedial measures to control sediment discharge / run-off and dust emission, and shall thereafter maintain these measures for as long as necessary to prevent sediment discharge or dust emission from the site.

19. Health of Land

- 19.1 A Remedial Action Plan (RAP) shall be prepared for Lots 1 – 40, 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 by a suitably qualified and experienced practitioner in the assessment and management of contaminated land. The RAP shall be prepared in general accordance with Contaminated Land Management Guidelines, No.1, Ministry for the Environment (revised 2011), and shall include (but not be limited to) a detailed discussion of the remedial options available and the extent of remedial works required, the methods of validation and the necessary pre-remediation site management procedures (e.g. fencing, warning signs, stormwater diversion, etc), that will avoid, mitigate, or remedy any adverse effects of the remedial works on human health. If remediation works are to be staged, a Remedial Action Plan will address this.

- 19.2 At least 10 working days prior to the commencement of the remedial works, the RAP shall be submitted to Council for review and certification that it is within the scope of this consent and it meets the conditions of this consent.

- 19.3 The consent holder shall submit a Site Validation Report to Council, Attention: Team Leader Environmental Health, by way of email to rcmon@ccc.govt.nz no later than 20 working days following the completion of soil disturbance. The Site Validation Report shall include but not be limited to:

- a) Details of the project works completed
- b) A site plan showing the location and volume of the completed earthworks and drawing of the 'as built' state of the site.
- c) For soils imported to site; information on the soil source site and any sample results.
- d) Documentation of any incidents and how they were resolved
- e) The results of any sampling undertaken.
- f) The soil guideline value that the site has been remediated to
- g) Records of the disposal of material identified as containing concentrations of contaminants above background levels. The record shall include:
 - (i) The approximate location of the site where the contaminated material was found;
 - (ii) The name of the person and company that collected the contaminated material from the site;
 - (iii) The date of collection;
 - (iv) The destination of the material;
 - (v) A description of the material, including known contaminants; and
 - (vi) The volume of the material collected.
 - (vii) Evidence of that disposal to an authorised facility.

- 19.4 The Site Validation Report for Lots 1 – 40, Lots 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 shall be written in accordance with the Ministry for the Environment Guideline for Reporting on Contaminated Sites in New Zealand (revised 2011). If works are staged, the Site Validation Report will be provided for each stage.

20. Plans for Geodata Plot

- 20.1 As soon as practical after the Section 223 certificate has been issued the consent holder is to advise the handling officer that the digital dataset for the subdivision is available in Land online and can be used for creation of the parcels in Council's digital database.

- 21. As Built Plans**
21.1 As built plans of stormwater retention/detention basins and swales are to be forwarded to the Subdivision Engineer together with capacity calculations to confirm that the works have been constructed in accordance with the engineering plan.
- 22. Filled Land**
22.1 All filling is to be carried out using good quality inert engineering material free of organic, putrescible or hazardous components, and in accordance with the rules in Chapter 8.9 of the District Plan. Topsoil is to be stripped and stockpiled on the site for later spreading over the filled land. All filling shall be compacted in even layers using appropriate mechanical equipment and under the general control of a suitably qualified Engineer. A report is to be submitted to Council by the Engineer detailing the extent of the filling and the nature of the fill material utilised.
- 23. Telecommunications and Energy Supply**
23.1 All lots shall be provided with the ability to connect to a telecommunications and electrical supply network at the boundary of the net area of each lot. Confirmation that the ducts or cables have been laid to the boundary of the net area is required.
23.2 The consent holder is to provide a copy of the reticulation agreement letter from the telecommunications network operator and a letter from the electrical energy network operator, or their approved agent to confirm capacity is available to the sites.
- 24. Right of Way Easements**
24.1 The rights of way easements as set out on the application plan shall be duly granted or reserved.
- 25. Service Easements**
25.1 The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.
25.2 Easements over adjoining land or in favour of adjoining land are to be shown in a schedule on the Land Transfer Plan. A solicitor's undertaking will be required to ensure that the easements are created on deposit of the plan.
- 26. Existing Easements over areas of Road to Vest**
26.1 The portion of the existing easements that extend over the road to vest are to be surrendered.
- 27. Easements over Reserves**
27.1 Easements over land that is to vest in the Council as reserve are to be shown on the survey plan in a Schedule of Easements. A solicitor's undertaking shall be provided to ensure that the easement is registered on the subject reserve at the time title is created. A section 223 certificate will not issue until such time as a section 239 certificate is issued by Council.
- 28. Existing easements under reserve to vest**
28.1 If the Council requires the retention of existing easements over land that is to vest in the Council as Reserve a certificate pursuant to Section 239(2) of the Resource Management Act 1991 will be issued.
- 29. Easements in Gross**
29.1 The legal instruments for easements in gross in favour of the Council are to be prepared by Council's consultant solicitor at the consent holder's cost. The consent holder's solicitor is to contact Anderson Lloyd Lawyers (Mike Kerr) requesting the preparation of the easement instruments. As built plans for the services covered by the easement are to be provided at Section 223 certification stage.
- 30. Road and/or Lane Names**
30.1 The consent holder shall order and install the road's nameplates. The nameplates shall be designed and installed in accordance with the IDS and CSS.
30.2 The location of the nameplates shall be submitted to Council's Subdivision Engineer for approval prior to their installation.

Advice Note: Nameplates usually take six weeks to manufacture. The location of the nameplates can be submitted in a plan which identifies the road's landscaping and location of street lighting as

required by this application. The consent holder is responsible for the cost of providing and installing the nameplates.

31. Amalgamations

31.1 The following amalgamation condition has been approved by Land Information New Zealand. The condition is to be included in the digital Title Plan dataset:

Stage 1:

“That Lot 14 hereon be transferred to the owner of Lot 1 DP 397987 (RT 391288) and one record of title be issued to include both parcels (CSN Request 1663316)

Stage 2:

That Lot 51 hereon and Lot 2 DP 436436 and Lot 3 DP 318553 (residue RT 944686) be held in the same record of title (CSN Request 1663316)”

32. Public Utility Sites

32.1 Any public utility site and associated rights of way easements and/or service easements required by a network operator are approved provided that they are not within any reserves to vest in the Council.

33. Consent Notice

Sewer – Lots 2 to 30 (Stage 1)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer – Lots 1, 31 to 40, 52 and 53 (Stage 2)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer (Stage 2 – Lot 51 only)

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Stormwater – Stage 1 – Lots 2 to 30

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater - Lots 1, 31-40, 52 and 53 (Stage 2)

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater – Lot 28 – Stage 1

Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.

The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDC to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Electricity Transmission – Lots 7, 8, 16 and 17 (Stage 1)

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kv overhead powerlines and 10m from the tower foundations.

Electricity Transmission – Lots 28, 30 (Stage 1)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Electricity Transmission Lots 31, 32 and 33-40 (Stage 2)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

34. Goods and Services Taxation Information

34.1 The subdivision will result in non-monetary contributions to Council in the form of land and/or other infrastructure that will vest in Council. Council's GST assessment form is to be completed to enable Council to issue a Buyer Created Tax Invoice.

35. Lapsing of Consent

35.1 The period within which this consent may be given effect to shall be 5 years from the date on which consent was granted. The consent will be given effect to when the survey plan has been certified pursuant to Section 223 of the Resource Management Act 1991.

ADVICE NOTES FOR CONSENT HOLDERS, TO BE READ IN CONJUNCTION WITH THE DECISION

Surrender of Consent

The Council hereby provides notice that under section 138(4) of the Act that the consent RMA/2020/1200 is surrendered in whole under section 138 of the Act.

Your Rights of Objection

If you do not agree with the Council's decision on this resource consent application, the conditions, or any additional fees that have been charged, you may lodge an objection with the Council under Section 357 or 357B of the Resource Management Act 1991. You have 15 working days from the date you receive this letter within which to lodge your objection **to the decision**. Objections **to additional fees** must be received within 15 working days of the date on which you receive the invoice. Your objection must be in writing and should clearly explain the reasons for your objection.

Commencement of this consent

The commencement date for your resource consent is the date of this letter advising you of the Council's decision, unless you lodge an objection against the decision. The commencement date will then be the date on which the decision on the objection is determined.

Lapsing of this consent

This resource consent for subdivision will lapse 5 years after the date of commencement of consent (i.e. the date of this letter) unless it has been given effect to by the Council issuing a certificate pursuant to Section 223 of the Resource Management Act 1991.

Application may be made under Section 125 of the Resource Management Act 1991 to extend the duration of the resource consent, and this must be submitted and approved prior to the consent lapsing.

Lapsing of s223 Certification

The s223 certification will lapse 3 years after the date of issue, the Section 223 certificate will lapse (if that certified plan has not been deposited in accordance with Section 224 of the Resource Management Act 1991). The s223 certificate can be re-certified only if the subdivision consent has not lapsed.

Electricity Transmission

Vegetation to be planted around the electricity distribution lines shall be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

Any construction works including the operation of mobile machinery in the vicinity of the electricity distribution lines must comply with the NZECP34:2001.

The detailed design for the stormwater basin to be constructed on Lot 101 under the existing 66kV electricity distribution lines shall comply with the NZECP34:2001

Vehicle access to Lots 33-39

It is noted either bridges or culverts will be required to gain access onto these sites. The culvert/bridge design will be finalised at the engineering design phase of this application.

Development Contributions

This proposal has been assessed for development contributions (DCs) under the provisions of the [Christchurch City Council Development Contributions Policy](#) (DCP). The proposal has been found to create additional demand on network and community infrastructure or reserves.

To help fund community facilities, the Local Government Act 2002 (LGA) allows a council to require development contributions if the effect of a development requires the council to provide new or upgraded infrastructure.

This Notice informs you of the DCs required by the Council for the development but is not a request for payment. An invoice will be issued by the Council when it requires payment of the DC's. Payment will be required before issue of a code compliance certificate for a building consent, commencement of the resource consent activity, issue of a section 224(c) certificate for a subdivision consent or authorisation of a service connection, whichever is first. An invoice can be issued earlier at your request. Council may also issue an invoice, at its discretion, if it considers the development is already utilising Council infrastructure for which DCs are being required.

Development contribution assessment summary

Development Contributions Summary		Application Ref: RMA/2022/163								
Customer Name		Assessment								
Project Address		Ngāi Tahu Development Holdings Limited								
Assessment Date		320 Shands Road & 637 Main South Road								
		3/02/2022								
Activity	Catchment	Existing HUE	Proposed HUE	Net Increase to HUE Demand	Discount	Chargeable HUE	HUE Rate (incl GST)	DC Charge (incl GST)	Reduction (incl GST)	Net DC Charge (incl GST)
		A	B	C	D	E	F	G	H	I
Network Infrastructure										
Water Supply	West	2.00	44.00	42.00	0.00%	42.00	\$1,849.24	\$77,668.08	\$0.00	\$77,668.08
Wastewater Collection	West	2.00	44.00	42.00	0.00%	42.00	\$3,332.19	\$139,951.98	\$0.00	\$139,951.98
Wastewater Treatment & Disposal	Christchurch	2.00	44.00	42.00	0.00%	42.00	\$1,075.65	\$45,177.30	\$0.00	\$45,177.30
Stormwater & Flood Protection	Halswell	2.00	44.00	42.00	96.00%	1.68	\$15,489.90	\$26,023.03	\$0.00	\$26,023.03
Road Network	Grow th	2.00	44.00	42.00	0.00%	42.00	\$3,863.84	\$162,281.28	\$0.00	\$162,281.28
Active Travel	Metro Zone	2.00	44.00	42.00	0.00%	42.00	\$979.46	\$41,137.32	\$0.00	\$41,137.32
Public Transport	Metro Zone	2.00	44.00	42.00	0.00%	42.00	\$553.63	\$23,252.46	\$0.00	\$23,252.46
Community Infrastructure	District Wide	2.00	44.00	42.00	0.00%	42.00	\$988.43	\$41,514.06	\$0.00	\$41,514.06
Total Network & Community Infrastructure								\$557,005.51		\$557,005.51
Reserves										
Regional Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Garden & Heritage Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Sports Parks	District Wide	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Neighbourhood Parks	Grow th	2.00	44.00	42.00	0.00%	42.00		\$0.00	\$0.00	\$0.00
Total Reserves								\$0.00		\$0.00
								GST 15%		\$72,652.89
Total Development Contribution										\$557,005.51

Where both a resource consent and building consent are required as part of the same development, a development contribution (DC) assessment will be undertaken for both consents. However the applicant need only pay for one assessment. As a result, the Council will only invoice in accordance with either the assessment on the resource consent or the assessment on the building consent, whichever is the lower of the two (after any corrections or reassessments undertaken in accordance with the DCP).

The DC assessment is valid for 24 months from the date the assessment is issued (usually with the consent). If the original assessment expires before payment is made, reassessment of the DCs required will be carried out at the same time the invoice is generated.

Reassessments will incorporate any increases to the development contribution requirement in line with the Producers Price Index (PPI) as described in Parts 2.9 and A.7.3 of the DCP. PPI adjustments will incorporate all years between the original application and the time the reassessment is carried out.

Reconsiderations and objections

Under section 199A of the Local Government Act 2002 you can request that the Council reconsider the required DC on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the Council incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the Council has recorded or used it when requiring a development contribution, was incomplete or contained errors.

A Request for Reconsideration form must be lodged with Council within 10 working days of receiving this DC Notice.

Under section 199C of the Local Government Act 2002 you can object to the assessed DC requirement on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the territorial authority incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the territorial authority has recorded or used it when requiring a development contribution, was incomplete or contained errors.

An Objection to DCs form must be lodged with the Council within 15 working days of receiving this DC Notice or a reconsidered assessment. A deposit of \$1,000.00 will be required to lodge an objection.

A form to request a reconsideration or lodge an objection can be found on our website.

To request an invoice please contact a Development Contributions Assessor by phone on (03) 941-8999 or email developmentcontributions@ccc.govt.nz. Once an invoice has been issued payment is required within 30 days. Please quote the project number with all correspondence.

Further information regarding development contributions can be found on our website www.ccc.govt.nz or by contacting a Development Contributions Assessor on (03) 941-8999.

Payments to Council

If any payments to Council are to be made through internet banking please email the details to resourceconsentapplications@ccc.govt.nz and a tax invoice will be raised. The internet banking details are:

Bank: *Bank of New Zealand*
 Account Name: *Christchurch City Council*
 Account Number: *02 0800 0044765 003*

The information you need to enter to help us identify your payment will be specified at the bottom of the invoice (i.e. Particulars, Code and Reference details).

Please note that all payments will be credited to our account on the next business day. Any payment made without the details above may take some time to be lodged against the correct account.

Please email resourceconsentapplications@ccc.govt.nz to notify us when you have made payment.

Council Site Characteristics Information

The Councils Site Characteristics Information on this site is as follows:

City Plan Other	A restricted rural water supply only is available to this property. On a restricted rural supply you can apply for up to 3 units of water (1 unit = a maximum of 1000 litres per day). The minimum supply available is 1 unit and the maximum is 3 units, although this is dependant on water availability as determined by Council. The cost of connection to this system is \$1400. Please contact the customer centre on 941 8666 to confirm the capacity for new connections.
City Plan Other	The conditions of supply of water are set out in the Christchurch City Council Water Supply, Wastewater & Stormwater Bylaw (2014), refer to www.ccc.govt.nz .
Community Board	Property located in Halswell-Hornby-Riccarton Community Board.
District Plan	Property or part of property affected by setback rules that apply to some activities near specified electricity lines.
District Plan Zone	Property or part of property within the Industrial Heavy Zone which is operative.
Earthquake Related	Some properties have experienced land damage and considerable settlement during the sequence of Canterbury earthquakes. While land in the green zone is still generally considered suitable for residential construction, houses in some areas will need more robust foundations or site foundation design where foundation repairs or rebuilding are required. Most properties have been assigned a technical category. Details of the MBIE guidance can be found at www.building.govt.nz/
ECan Requirement	ECan holds indicative information on liquefaction hazard in the Christchurch area. Information on liquefaction can be found on the ECan website at www.ecan.govt.nz/liq or by calling ECan customer services on Ph 03 353 9007. The Christchurch City Council may require site-specific investigations before granting future subdivision or building consent for the property, depending on the liquefaction potential of the area that the property is in.
Ecan Requirement	There may be objectives, policies or rules in a regional plan or a regional bylaw that regulate land use and activities on this site. Please direct enquiries to Canterbury Regional Council (Environment Canterbury).
Electoral Ward	Property located in Hornby Electoral Ward
Flooding Related	Stormwater drainage to an approved soakage chamber (for roof stormwater only) is a condition of any future building on this site unless it is a known or declared hazardous site.

Flooding Related	This property is not in a tsunami evacuation zone. It is not necessary to evacuate in a long or strong earthquake or during an official Civil Defence tsunami warning. Residents may wish to offer to open their home to family or friends who need to evacuate from a tsunami zone, and should plan with potential guests to do so in advance. More information can be found at https://ccc.govt.nz/services/civil-defence/hazards/tsunami-evacuation-zones-and-routes/
Land Characteristic Other	Land Information New Zealand (LINZ) engaged Tonkin and Taylor to provide a Geotechnical Report on Ground Movements that occurred as a result of the Canterbury Earthquake Sequence. The report indicates this property may have been effected by a degree of earthquake induced subsidence. The report obtained by LINZ can be accessed on their website at https://www.linz.govt.nz/land/surveying/earthquakes/canterbury-earthquakes/information-for-canterbury-surveyors
Land Characteristic Other	This property is located in a limited sewer discharge area. Consultation about sewage flows may be required with the council's trade wastes Unit.
Utility Related	This site is traversed by or is adjacent to high tension overhead power lines and pylons. Minimum clearance distances apply to buildings, structures and trees. It is recommended that Orion be contacted for further information.
Utility Related	This site is traversed by or is adjacent to high tension overhead power lines and pylons. Minimum clearance distances apply to buildings, structures and trees. It is recommended that Transpower be contacted for further information.

Allocated Street Numbers

Street number allocation was not available at time of granting this consent. For any street number allocation enquiries please email streetnumbering@ccc.govt.nz

Future Cancellation of Amalgamation Condition

To cancel the amalgamation condition a document pursuant to section 241(3) of the Resource Management Act 1991 will be required from the Council. Although the execution of such a document is not a subdivision consent the Council will need to be satisfied that similar requirements to a subdivision consent have been met before cancelling the amalgamation condition. There is a fee for this, as per the Subdivisions Fees Schedule.

Lighting in Private Ways

The Council does not require lighting within private ways, nor will it accept the ongoing maintenance or running costs associated with lighting within the private way. Any proposal to light the private way shall include a method of payment of the ongoing costs by the benefiting owners.

Building consent requirements

This subdivision consent has been processed under the Resource Management Act 1991 and relates to planning matters only. You will also need to comply with the requirements of the Building Act 2004. Please contact a Building Consent Officer (941-8999) for advice on the building consent process.

Reported and recommended by: Rachel Cottam, Planner

Date: 10/02/2021

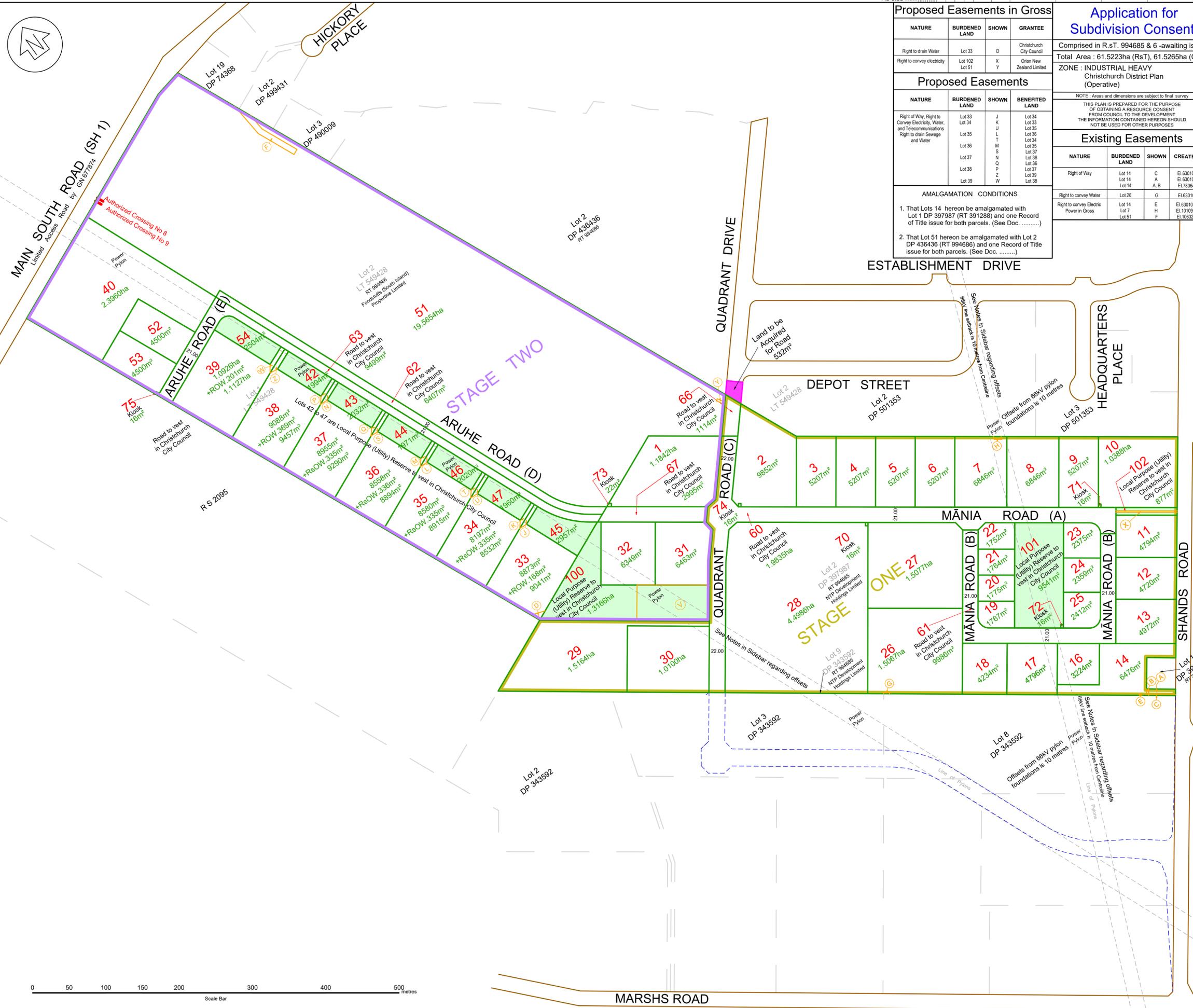
Decision

That the above recommendations be adopted for the reasons outlined in the report.

Delegated officer:



Nathan Harris
Senior Planner
11/02/2022 03:16 PM



Proposed Easements in Gross

NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water	Lot 33	D	Christchurch City Council
Right to convey electricity	Lot 102 Lot 51	X Y	Orion New Zealand Limited

Proposed Easements

NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications	Lot 33 Lot 34 Lot 35 Lot 36 Lot 37 Lot 38 Lot 39	J K L M S N O P Z W	Lot 34 Lot 33 Lot 35 Lot 36 Lot 34 Lot 35 Lot 37 Lot 38 Lot 39

AMALGAMATION CONDITIONS

- That Lots 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)
- That Lot 51 hereon be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)

Application for Subdivision Consent

Comprised in R.S.T. 994685 & 6 -awaiting issue

Total Area : 61.5223ha (RsT), 61.5265ha (Calc)

ZONE : INDUSTRIAL HEAVY
 Christchurch District Plan (Operative)

NOTE: Areas and dimensions are subject to final survey

THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements

NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14 Lot 14 A Lot 14 A, B	C A A, B	EI 6301050.7 EI 6301050.9 EI 7806491.5
Right to convey Water	Lot 26	G	EI 6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7 Lot 51	E H F	EI 6301050.11 EI 10109286.1 EI 10632183.2

Notes:

NOTE: Lots 70 to 75 are Electricity Kiosk sites.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

- Offsets from 220kV pylon foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
- Offsets from the 66kV pylon foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the pylon bases where it widens out to be 10 metres from the edges of the pylon foundations.
- A Power Easement will be provided over Lots 30 and 101 if required by Orion.

There is no Lot 15 on this plan.

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	TMCL	-
Proj. Mgr	Jerry Schutte	-	Coord System:	NZGD 2000
Design Review	-	-	Calibration:	Mt Pleasant 2000
Approved	-	-	Origin of Levels:	-
Client	NGAI TAHU Property			
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road			
Drawing Title	Proposed Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428.			
Scales	1:2500 [A1] 1:5000 [A3]			
Project No.	Set No.	Sht No.	Rev.	
442038	C1	1	N	

Project No.	Set No.	Sht No.	Rev.
442038	C1	1	N



FOR CONSENT

Proposed Easements in Gross

NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water Limited as to Duration until Lot 100 is Vested as Local Purpose (Utility) Reserve in Stage 2	Lot 201	V	Christchurch City Council
Right to convey electricity	Lot 15 Lot 102 Lot 201	R X Y	Orion New Zealand Limited

Application for Subdivision Consent

Comprised in R.T. 994685 -awaiting issue
 Total Area : 41.3168ha (RT), 41.3218ha (Calc)
 ZONE : INDUSTRIAL HEAVY
 Christchurch District Plan (Operative)
 NOTE : Areas and dimensions are subject to final survey
 THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements

NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14 Lot 14	C A A, B	EI.6301050.7 EI.6301050.9 EI.7806491.5
Right to convey Water	Lot 26	G	EI.6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7	E H	EI.6301050.11 EI.10109286.1

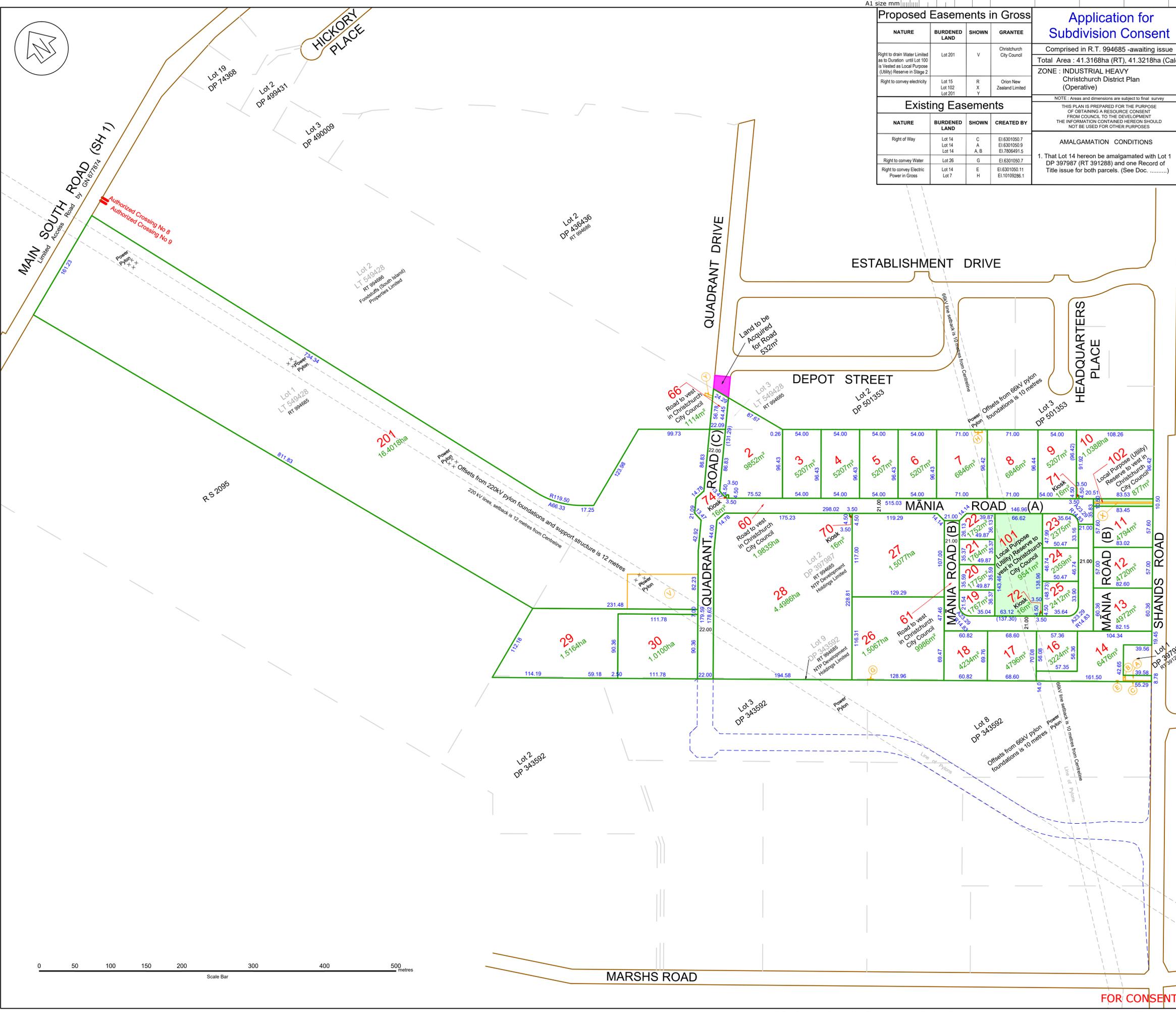
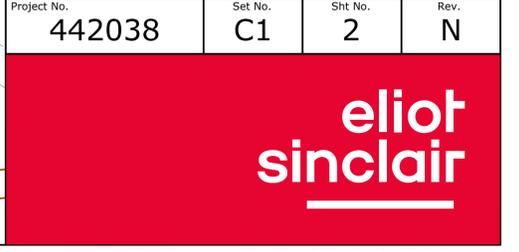
AMALGAMATION CONDITIONS
 1. That Lot 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)

Notes:
 NOTE: Lots 70 to 72 and 74 are Electricity Kiosks.
 Service Easements to be created as Required.
 OFFSET PROVISIONS FOR HIGH VOLTAGE LINES
 1. Offsets from 220kV Pylon Foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
 2. Offsets from 66kV Pylon Foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the Pylon Bases where it widens out to be 10 metres from the edges of the Pylon Bases.
 3. A Power Easement will be provided over Lots 30 and 101 if required by Orion.
 There is no Lot 15 on this plan.

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1 (St 2); enlarge Lot 74; Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Design Review		Date	Calibration:	Origin of Levels:
Approved		Date		Datum:

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	STAGE One Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 & 3 LT 549428.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	2	N



FOR CONSENT

Proposed Easements in Gross			
NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water	Lot 33	D	Christchurch City Council
Proposed Easements			
NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications	Lot 33	J	Lot 34
Right to drain Sewage and Water	Lot 35	L	Lot 35
	Lot 36	M	Lot 34
	Lot 37	S	Lot 35
	Lot 38	N	Lot 36
	Lot 38	Q	Lot 37
	Lot 38	P	Lot 38
	Lot 39	Z	Lot 39
	Lot 39	W	Lot 38
AMALGAMATION CONDITIONS			
2. That Lot 51 hereon be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)			
Application for Subdivision Consent			
Comprised in Pts R.s.T. 994685 & 6 -awaiting issue			
Total Area : 36.6073ha (RsT), 36.6065ha (Calc)			
ZONE : INDUSTRIAL HEAVY Christchurch District Plan (Operative)			
NOTE: Areas and dimensions are subject to final survey			
THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES			
Existing Easements			
NATURE	BURDENED LAND	SHOWN	CREATED BY
Right to convey Electric Power in Gross	Lot 51	F Y	EI.10632183.2 See Stage One
Existing Easements to be Surrendered			
NATURE	SERVIENT TENEMENT	SHOWN	CREATED BY
Right to drain Water in Gross	Lot 100	V	See Stage One

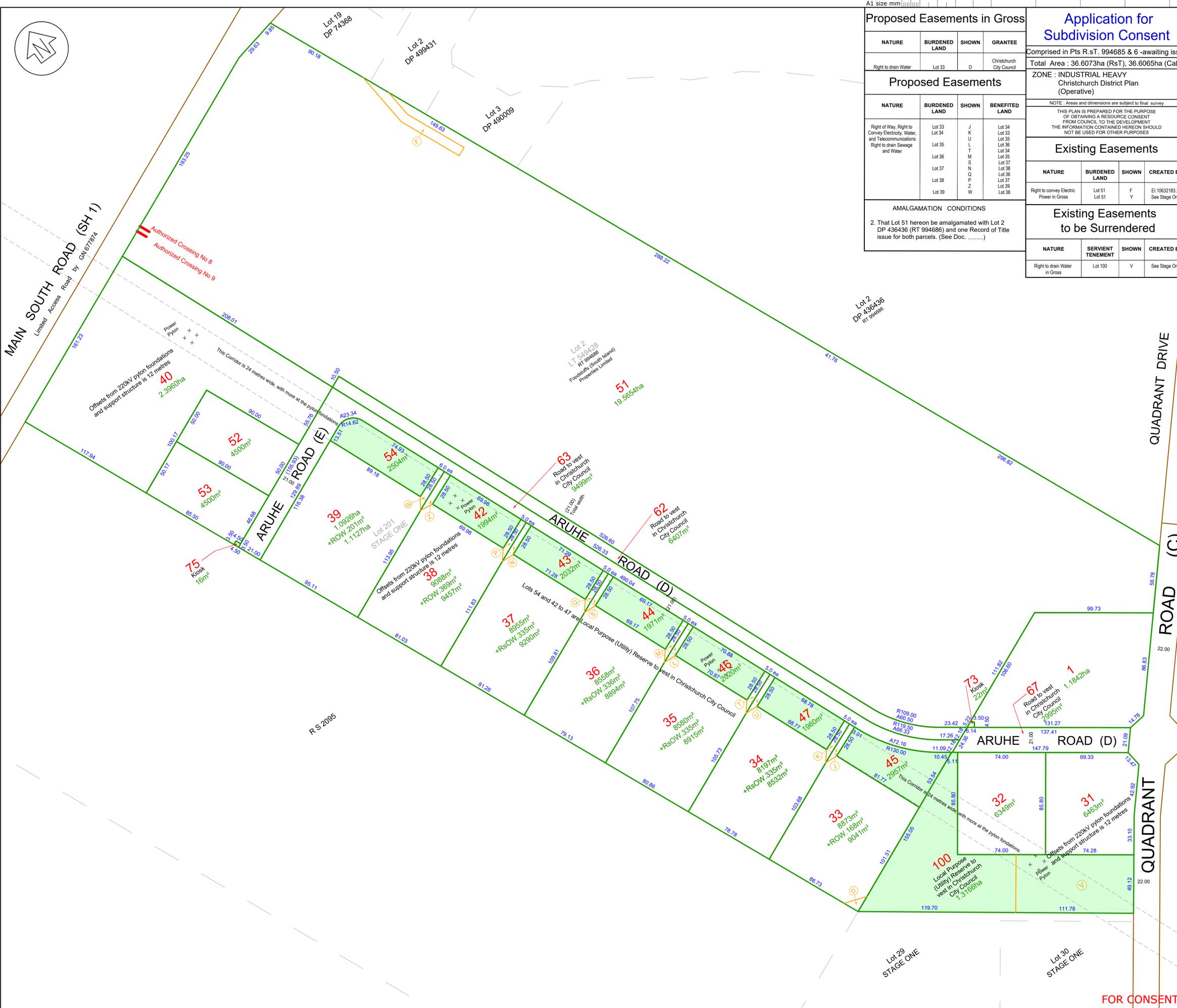
Notes:

NOTE: Lots 73 and 75 are Electricity Kiosks.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

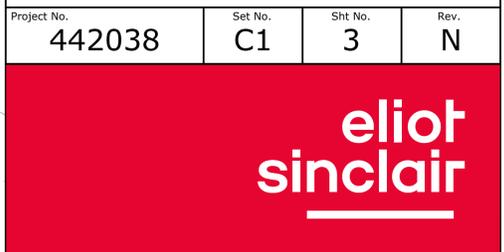
1. Offsets from 220kV Pylon Foundations and Support Structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the Pylon Bases and Support Structures where it widens out to be 12 metres from the edge of the said features.



Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
H	Adjust Lots 19-25, 101; access Lot 29; road Lots 17-101	rksq	20.03.2020
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 15 - 17.	rksq	5.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Jerry Schutte		Calibration:	
Design Review			Origin of Levels:	
Approved			Datum:	

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	STAGE Two Subdivision of Lot 2 LT 549428 and Lot 201 Stage One		
Scales	1:1500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	3	N



FOR CONSENT



Notes:

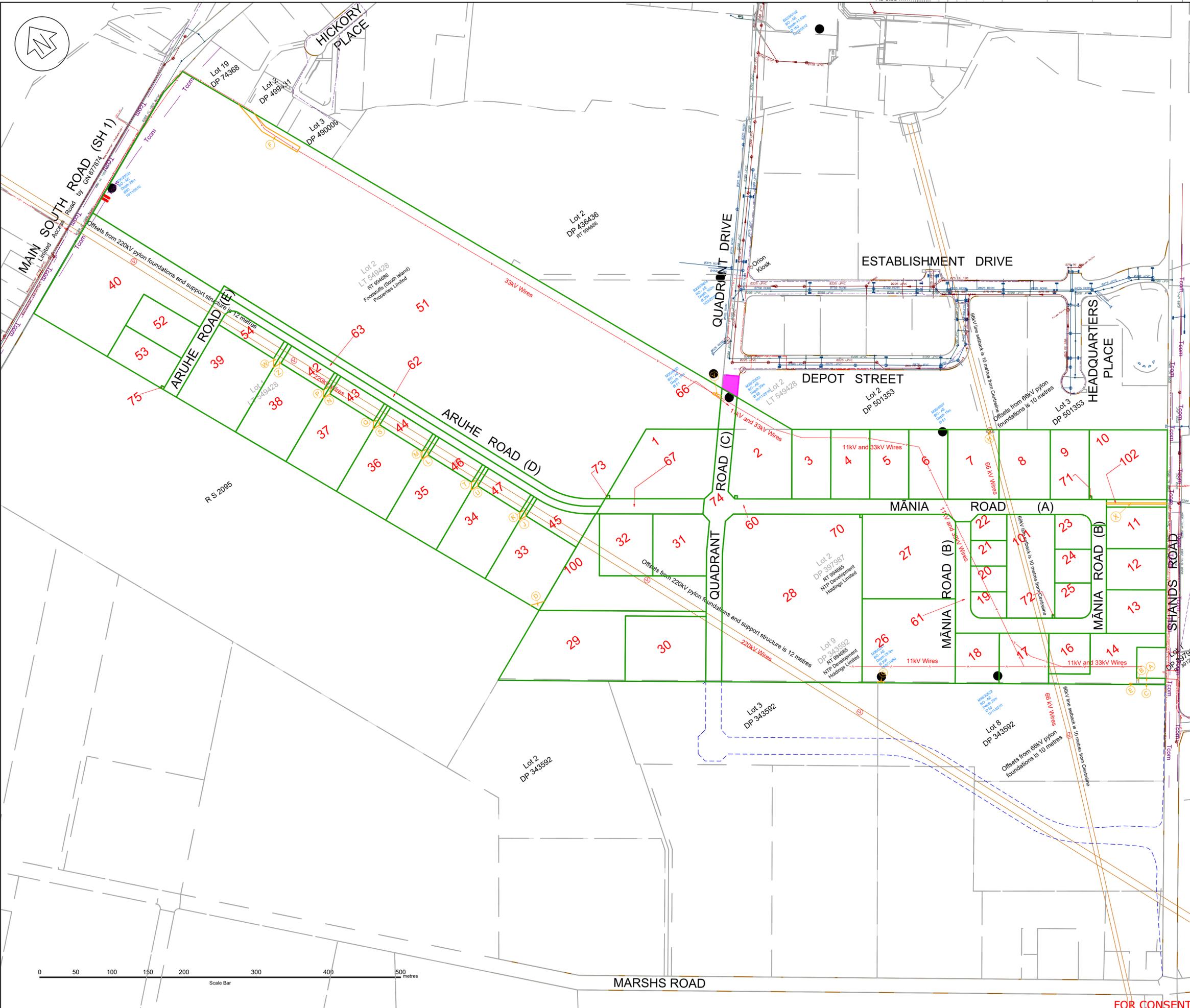
Rev.	Description	Drawn	Date
J	Add Lots 46, 47; add Leg-ins Lots 34, 35, 36 & 37	rksg	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428; arcs Lots 19,23,25	rksg	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksg	13.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksg	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksg	19.8.2021
F	Add Kiosk Sites	rksg	13.12.2019

Designed	Name	Date	Surveyed:	Survey Date:
	TMCL	-	M.Oates & M.Petty	Apr. Aug 2019
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Drng. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	CDD
Design Review		Date	Origin of Levels:	B87T (BM0380)
Approved		Date	Capped in grass berm	Cnr Foremans/Halswell Jctn Rds
			R.L.42.188m	Datum: CDD

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Topographical Details for Proposed Subdivision of 320 Shands Rd etc.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	4	N



FOR CONSENT



Notes:

Rev.	Description	Drawn	Date
J	Add Lots 46, 47; Add Leg-ins Lots 34, 35, 36 & 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9	rksq	19.8.2021
F	Add Kiosk Sites	rksq	13.12.2019

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	M.Oates & M.Petty	Apr. Aug 2019
Dr. Chk	Bruce Sinclair	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Jerry Schutte		Mt Pleasant 2000	Calibration: CDD
Design Review		Date	Origin of Levels:	B87T (BM0380)
Approved		Date	Capped in grass berm	Cnr Foremans/Halswell Jctn Rds
			R.L.42.188m	Datum: CDD

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Existing Services for Proposed Subdivision of 320 Shands Rd etc.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	5	N

**eliot
sinclair**

FOR CONSENT



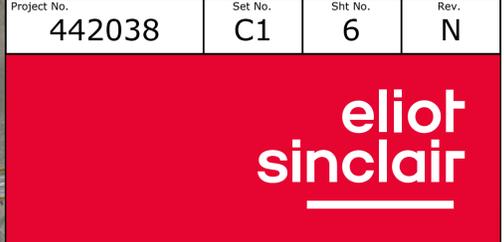
Notes:

Aerial Photography used in this plan has been provided by Land Information New Zealand and is used courtesy of Creative Commons Licence 4.0.

Rev.	Description	Drawn	Date
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
D	Correct Bdy Lot 2 and Lot 2 DP 501353	rksq	3.12.2019
E	Road/Lot 28 amended 614.45m from Shands Rd	rksq	9.12.2019
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Dr. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	
Design Review		Date	Origin of Levels:	
Approved		Date	Datum:	

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Aerial Photo Prop. Subdn of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	6	N



Report / Decision on Change or Cancellation of Condition(s)

(Section 127)

s127 Application Number:	RMA/2022/163/A
Original application number:	RMA/2022/163
Applicant:	Ngai Tahu Development Holdings Limited
Site address:	20 Shands Road and 637 Main South Road, Hornby
Legal Description:	Lots 1-3 LT 549428, Lot 2 DP 397987 and Lot 9 DP 343592
Zoning:	Industrial Heavy
Overlays and map notations:	Christchurch International Airport Protection Surfaces overlay, 33kV Electricity Lines, 66kV Electricity Distribution Lines, and 220kV National Grid
Activity Status:	Discretionary activity
Description of Application:	Change of conditions pursuant to Section 127

Introduction

The applicant is seeking to vary the conditions of an existing resource consent (RMA/2022/163) which was granted on a non-notified basis by the Council on 11 February 2022. The consent granted is to create 42 fee simple allotments and associated earthworks.

The applicant is seeking to cancel condition 18.14 of the subdivision consent as laid out below.

18. Earthworks

18.14 Provision shall made for overland stormwater flows from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.

Advice note: This condition is relevant for stages 1 and 2.

This flow path is not required to be protected by the neighbouring development.

Description of site and existing environment

The application site and the surrounding environment are described in the officer's report for the original application (RMA/2022/163). I adopt that description.

Statutory Considerations

Section 127 of the Resource Management Act 1991 states:

“127. Change or cancellation of consent condition on application by consent holder

- (1) *The holder of a resource consent may apply to the consent authority for a change or cancellation of a condition of a consent, subject to the following:*
 - (a) *the holder of a subdivision consent must apply under this section for a change or cancellation of the consent before the deposit of the survey plan (and must apply under section 221 for a variation or cancellation of a consent notice after the deposit of the survey plan); and*
 - (b) *No holder of any consent may apply for a change or cancellation of a condition on the duration of the consent.*
- (2) *Repealed*
- (3) *Sections 88 to 121 apply, with all necessary modifications, as if -*
 - (a) *the application were an application for a resource consent for a discretionary activity; and*
 - (b) *the references to a resource consent and to the activity were references only to the change or cancellation of a condition and the effects of the change or cancellation respectively.*

- (4) *For the purposes of determining who is adversely affected by the change or cancellation, the local authority must consider, in particular, every person who -*
- (a) *made a submission on the original application; and*
 - (b) *may be affected by the change or cancellation.*

Type of Application

The first consideration that is required is whether the application can be treated as one for a change of conditions or whether it will result in a fundamentally different activity or one having materially different adverse effects, such that it should be treated as a new application. The original application sought to subdivide the application site into 42 fee simple allotments and associated earthworks.

In my opinion this application can be considered as a variation to the original resource consent as the nature of the activity will not fundamentally change and the adverse effects will not be materially different from those associated with the original consent.

Written approvals [Sections 95D(e), 95E(3)(a) and 104(3)(a)(ii)]

No written approvals have been provided with the application.

Effects on the environment and affected persons [Sections 95A, 95B, 95E(3), 95D and 104(1)(a)]

Pursuant to Section 127(3) the application must be assessed as a discretionary activity. As such, the Council's assessment is unrestricted and all actual and potential effects of this proposal must be considered. In my opinion the effects on the environment associated with the proposed cancellation of conditions relate to general matters of subdivision.

The applicant has proposed that condition 18.14 be amended in relation to a flow path from the adjacent land. The owner of the adjacent land has confirmed they have no need for the flow path to be protected via easement, as the land will be developed in due course and the site levels changed as a result.

The proposed change has been reviewed by Council's Senior Subdivision Engineer, Yvonne McDonald. Ms McDonald comments that as no public water is involved an easement in gross to Council is not desirable, and that she has no issues with the proposed amendment.

I do not consider any persons to be adversely affected by the proposed cancellation of conditions nor there any adverse effects on the wider environment.

Notification assessment [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notified or limited notification of an application is required.

Public notification

- Step 1. The application does not meet any of the criteria for mandatory notification in section 95A(2).
- Step 2. The application does not meet any of the criteria in section 95(A)(5)(b) precluding public notification.
- Step 3. There are no rules or NES requiring notification, and any adverse effects on the environment will be no more than minor (section 95A(8)).
- Step 4. There are no special circumstances that warrant public notification (section 95A(9)).

In accordance with the provisions of section 95A, the application must not be publicly notified.

Limited notification assessment

- Step 1. There are no affected groups or persons in relation to customary rights, customary marine titles or statutory acknowledgements as outlined in section 95B(2) and (3).
- Step 2. There are no rules or NES preventing limited notification, and the application is not for a controlled activity land use consent under the District Plan (section 95B(6)).
- Step 3. As discussed above, no persons are considered to be affected under section 95E (sections 95B(7) and (8)).
- Step 4. There are no special circumstances that warrant notification to any other persons (section 95B(10)).

In accordance with the provisions of section 95B, the application must not be limited notified.

Other Section 104 matters

The application is:

- Consistent with the relevant objectives and policies in the District Plan as the subdivision and the subsequent changes, have been appropriately designed and serviced for the anticipated purpose.
- Able to be granted consent without notification, pursuant to Section 104(3)(d).

For completeness, I note that the District Plan gives effect to Part 2 of the Act and the higher order planning documents referred to in s104(1)(b). The Plan was competently prepared and appropriately reflects the higher order provisions, so they do not need to be specifically addressed in this report¹.

Recommendations

That, for the reasons outlined above:

- A. The application be processed on a **non-notified** basis in accordance with Sections 95A and 95B of the Resource Management Act 1991.
- B. The application **be granted** pursuant to Section 127 of the Resource Management Act 1991.

The conditions of consent shall now read as follows:

Land Use Consent

1. The development shall proceed in accordance with the information and plans submitted with the application.
2. No development is permitted on Lots 1 to 40 and 52-53 until such time as the following road connections (legal and physical) are made to the application site:
 - i) To Quadrant Drive to the north.

Any development on the subject lots must comply with all rules in the District Plan except for 16.5.4.1.3 RD3.

Advice Note: This consent does not permit urban activities on Lot 51 which are balance lots.

3. All earthworks associated with the creation and formation of the subdivision shall be carried out in accordance with the conditions of subdivision consent.

Subdivision

1. **Compliance with Application Information**
 - 1.1 The survey plan, when submitted to Council for certification is to be substantially in accordance with the stamped approved application plans prepared by Eliot Sinclair, Project No. 442038 Revision N, and Sheets 1 to 6.
2. **Staging**
 - 2.1 The subdivision may be carried out in stages in accordance with the stamped approved plans.
 - 2.2 Stages 1 and 2 shall not progress until such time as the following road connections (legal and physical) are made to the application site:
 - i. To Quadrant Drive to the north (i.e. over Lots 2 and 3 DP 501353).
3. **New Road to Vest**
 - 3.1 All roads are to be formed and vested in the Council to the satisfaction of the Subdivision Engineer with underground wiring for electricity supply and telecommunications.

¹ R J Davidson Family Trust v Marlborough District Council [2018] NZCA 316

4. Local Purpose (Utility) Reserve land

- 4.1 Lots 101, 102, 42 to 47, 54 and 100 (As shown in Approved Plan 1) are to vest as Local Purpose (Utility) Reserve, clear of any easements.

Advice Note - A Local Purpose (Utility) Reserve, including any landscape improvements, shall hold no credits towards the final Reserve Development Contributions Assessment

Advice note: Any underground infrastructure across land to be vested as Reserve will require an easement application in compliance with s239, prior to the issuing of s224 certificate. The application should be made to the Consent Planner, at the Consent Holders expense.

5. Engineering General

5.1 Asset Design and Construction

All infrastructure assets to be vested in the Council are to be designed and constructed in accordance with the Christchurch City Council's Infrastructure Design Standard (the IDS) and the Construction Standard Specifications (the CSS).

5.2 Quality Assurance

The design and construction of all assets is to be subject to a project quality system in accordance with Part 3: Quality Assurance of the IDS.

- A. Submit a Design Report, Engineering Plans, Erosion and Sedimentation Plans, Environmental Management Plan and Design Certificate complying with clause 3.3.2 to the Subdivision Engineers (Planning Team 1). The Design Report and engineering plans are to provide sufficient detail to confirm compliance with the requirements of the IDS and this consent.
- B. Submit a Contract Quality Plan for review by the Council and an Engineer's Review Certificate complying with clause 3.3.3.

Physical works shall not commence until a Council Engineering Officer confirms that the above documentation has been received and accepted.

- C. Submit an Engineer's Report and Completion Certificate complying with clause 3.3.4.

An Engineer's Report is a document specific to a project, which describes how the project was managed and administered in compliance with the IDS, the Construction Standard Specifications, the Contract Quality Plan and the resource consent or project brief. It provides background information to the release of the 224(c) certificate.

Note: Part 3 of the IDS sets out the Council's requirements for Quality Assurance. It provides a quality framework within which all assets must be designed and constructed. It also sets out the process for reporting to Council how the works are to be controlled, tested and inspected in order to prove compliance with the relevant standards. It is a requirement of this part of the IDS that certification is provided for design and construction as a pre-requisite for the release of the 224c certificate. The extent of the documentation required should reflect the complexity and/or size of the project.

In addition to the above, all infrastructure is to be designed to resist the effects associated with earthquake induced liquefied soils. All liquefaction hazard mitigation shall be designed for a 1 in 150 year return period serviceability limit seismic design event and a 1 in 500 year return period ultimate limit state seismic design event as defined in NZS1170.5.2004.

5.3 Traffic Management

An approved Traffic Management Plan (TMP) shall be implemented and no works are to commence until such time as the TMP has been installed. The TMP shall be prepared by an STMS accredited person and submitted to and approved by the Christchurch Transport Operation Centre – please refer to www.tmpforchch.co.nz

5.4 Survey Plan Requirements

The surveyor is to forward a copy of the title plan and survey plan to the Subdivision Planner (that issued the consent), Resource Consents & Building Policy Unit as soon as the plan has been lodged (or earlier if possible) for checking at Land Information New Zealand for entering into the Council GIS system.

5.5 Laterals for rear Lots

All private sewer and stormwater laterals (serving rear lots) shall be installed under a single global Building Consent by a Licensed Certifying Drain Layer and the Code Compliance Certificate forwarded to Council's Subdivision Team as part of the Sec 224c application.

5.6 *CCTV Inspections*

Pipeline CCTV inspections are to be carried out on all gravity pipelines in compliance with the Council Standard Specifications (CSS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/construction-standard-specifications/pipeline-cctv-inspections/>

5.7 *Services As-Built Requirements*

As-Built plans and data shall be provided for all above and below ground infrastructure and private work in compliance with the Infrastructure Design Standards (IDS):

<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/infrastructure-design-standards/as-built-survey-and-data-requirements/>

Note: this includes RAMM and costing data

As-Built Plans are to be provided for any easements in gross over pipelines. The plans are to show the position of the pipelines relative to the easements and boundaries.

6. Water Supply

6.1 The points of water supply for the subdivision shall be the existing DN200 uPVC water main in Quadrant Drive and the existing DN200 AC water main in Shands Road.

6.2 The water supply shall be designed by a suitably qualified person in accordance with the Infrastructure Design Standard and in accordance with the NZ Fire Service Fire Fighting Water Supplies Code of Practice NZS 4509:2008 to the satisfaction of the Water & Wastewater Asset Planning Team. Engineering drawings supported by hydraulic model outputs shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water & Waste Asset Planning Team prior to the commencement of any physical work.

6.3 With the exception of the water main connection between Lot 60 (Road to Vest) and through Lot 102 (Local Purpose (Utility) Reserve to vest in Christchurch City Council) to the point of supply in Shands road, all water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.4 All water mains and submains for the subdivision shall be installed in road to be vested in Council.

6.5 Water mains shall be extended along the full length of roads to vest and be terminated with temporary hydrants as per the requirements of the Infrastructure Design Standard.

6.6 The construction of Council vested water infrastructure shall be carried out by a Council approved water supply installer at the expense of the applicant.

6.7 Lots 1-40, 52 and 53 shall be served with a water supply to their boundary. Submains shall be installed to 1m past each lot boundary.

7. Sewer

7.1 Lots 1-40, 52 and 53 shall be serviced by a Local Pressure Sewer System (LPSS) designed in accordance with Council's Infrastructure Design Standards and Construction Standard Specifications. Engineering drawings supported by hydraulic calculations shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water and Waste Planning Team prior to the commencement of any physical work

7.2 The approved sanitary sewer outfall for Lots 1-40, 52 and 53 shall be the DN225 uPVC gravity sewer main in Quadrant Drive.

7.3 The consent holder shall put in place measures to enable the initial operation of the local pressure sewer system within and from the subdivision during the build phase, including (but not limited to) ensuring self-cleansing flow and limiting sewage retention time within the system when the design number of pressure sewer tanks are not yet in operation. These measures shall be reported to the Subdivisions Engineer prior to seeking section 224(c) certification.

- 7.4 With the exception of Lot 51, each lot shall have a Boundary Kit located within the legal road. The pressure lateral from the Boundary Kit must extend at least 600mm into the net site of each lot.

Advice note: A sewer connection for Lot 51 shall not be available until wastewater capacity has been confirmed by Council and such a connection may not be approved for discharge to the sewer outfall identified for Lot 1 to Lot 40, 52 & 53.

- 7.5 Installation of the pressure sewer mains and boundary kits shall be carried out by a Council Authorised Drainlayer (Pressure Sewer Reticulation).

- 7.6 Provision will be made for odour treatment and corrosion protection at the discharge point in Quadrant Drive in accordance with Council's Infrastructure Design Standards, Construction Standard Specification and operational requirements. Engineering drawings supported by design calculations and specifications for the odour treatment facility and corrosion protection works shall be sent to the Subdivision Engineer for Engineering Acceptance prior to the commencement of any physical work.

Advice Note: Council may reach an agreement with the Developer to establish the odour treatment facility approximately 600 metres downstream at PS82 in Produce Place in order to streamline future operations.

- 7.7 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2):

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

8. Sewer (Stage 2 – Lot 51 only)

- 8.1 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the title of Lot 51:

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

9. Stormwater

- 9.1 The stormwater management and mitigation system to be constructed under this application shall rely on stormwater treatment and disposal to ground via infiltration. The system shall be comprised of channels, sumps, pipes, swales, first flush soil adsorption basins, detention basins and/or rapid infiltration systems. In addition to the below conditions, the system shall meet the requirements of the CCC Waterways, Wetlands and Drainage Guide (WWDG), the Infrastructure Design Standard (IDS 2018) and the Construction Standard Specifications (CSS 2018).
- 9.2 The consent holder shall demonstrate that authorisation for operational and construction phase stormwater discharge has been obtained from the relevant authority.
- 9.3 Stormwater generated from roofs of all buildings shall be collected via a sealed stormwater system separated from all other stormwater and discharged into an onsite rapid soakage system.
- 9.4 The following consent notice shall be registered on the title of all allotments Lots 2 to Lot 30 (Stage 1), Lot 1, Lot 31 to Lot 40, Lots 52 and 53 (Stage 2) to ensure ongoing compliance with consent conditions:

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

- 9.5 Stormwater generated from all roads and hardstanding areas within all allotments (except Lot 28 and Lot 51) shall be collected via channels, sumps, pipes or swales and discharged into first flush soil adsorption basins and detention/rapid soakage facilities located within allotment to be vested in Christchurch City Council as Local Purpose (Utility) Reserve. The first flush soil adsorption basins shall:
- a) Utilise a vegetated swale, sediment forebay or alternative approved pre-treatment system;
 - b) Be designed to hold (at minimum) the volume of stormwater runoff generated from the first 25mm of rain falling on roading and hardstand areas within the development site;
 - c) Utilise 150mm depth of treatment media consisting of sand/topsoil mixture to be specified by Council engineers during engineering design phase;
 - d) Utilise a 250mm depth of 19mm concrete "pre-mix" or other approved drainage layer mix below the treatment media;
 - e) Discharge to free-draining gravels after passing through the treatment media and drainage layers. If free draining gravels are not encountered at the design depth, unsuitable material shall be excavated and backfilled with free-draining washed rock;
 - f) Have average batter slopes of 1 vertical in 4 horizontal, or flatter, and;
 - g) Be planted with an approved grass species on the basin floor and an approved grass mix and/or approved tree and shrub plantings on the batter slope.
- 9.6 Stormwater generated in excess of the first flush volume shall discharge via flow splitter or upstream weir into separate detention/rapid soakage basins. The detention/rapid soakage basins shall:
- a) Be designed to hold the volume required to capture and dispose of the critical 2 percent annual exceedance probability storm, but not less than the stormwater volume generated from a 10% AEP, 18-hour storm, minus the first flush volume;
 - b) Utilise either rapid soakage chambers/trenches designed in accordance with WWDG Section 6.5 or a fully gravelled base extending down to natural free draining gravels;
 - c) Have average batter slopes of 1 vertical in 4 horizontal or flatter;
 - d) Be planted with an approved grass mix and/or approved tree and shrub plantings on the basin floor and batter slopes.
- 9.7 The consent holder shall confirm, by Detailed Site Investigation and Validation Report (if required) that soil contaminants within all Local Purpose (Utility) Reserves containing stormwater basins or swales are below ANZECC SQG-High Sediment Quality guidelines.
- 9.8 A landscape buffer of average width 5 metres is to be established between all stormwater basins and all allotments. The Council engineer may, at their discretion, allow some variance to this buffer width and planting requirements.

- 9.9 The stormwater management and mitigation system shall be designed to ensure complete capture, retention and disposal of all stormwater runoff from the site for all rainfall events up to and including the critical two percent annual exceedance probability storm. This will require internal reticulation and conveyance to meet Council's inundation standards as specified in the WWDG. The conveyance system shall be designed to ensure that even for events where the critical peak stormwater runoff flow rate occurs that all resulting runoff reaches the first flush treatment system. A combination of primary and secondary conveyance systems may be used to ensure this level of service is achieved.
- 9.10 The primary stormwater reticulation network shall be designed to convey (at minimum) the critical twenty percent annual exceedance probability storm event. No flooding of private property shall occur during the critical ten percent annual exceedance probability storm event and no flooding of buildings shall occur during the critical two percent annual exceedance probability storm event.
- 9.11 Prior to the commencement of engineering works, the consent holder shall demonstrate, by means of appropriate site testing (by a suitably qualified professional) that the 'design' soakage rates for the infiltration systems are able to be achieved within the stormwater disposal sites. Measured soakage rates, determined by test, shall be reduced by a factor of three (or more) in the final design of the soakage system.
- 9.12 At the time of excavation of the actual infiltration site/s during the construction phase of the development, the consent holder shall confirm that the initial assumptions of infiltration rates, derived from the preliminary testing, are appropriate. Subject to this investigation, the Council may review these conditions pursuant to Section 128 of the Act to require the consent holder to alter the engineering design.
- 9.13 The proposed soakage areas are not to be used for major construction sedimentation control sites. The sediment control management plan for the development works shall to be designed such that any sediment discharge or accumulation within the proposed soakage areas is avoided. Care is to be taken during construction to ensure that the natural permeability of the soils is not compromised by heavy machinery use or other construction activities.
- 9.14 Upon practical completion of the first flush soil adsorption basins and prior to issuance of the s224c certificate, hydraulic conductivity testing of all installations shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 75mm-300mm per hour, with no single test result less than 50mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.
- 9.15 To ensure compliance with the above conditions, the value of restoration of all first flush soil adsorption basins shall be determined and agreed by the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit. The consent holder shall bond that sum with the Council prior to the issuance of the Section 224(c) Certificate.
- 9.16 Safe and adequate access to surface water mitigation facilities for maintenance and sediment removal shall be provided and designed in accordance with WWDG Sections 6.8 & 6.9.
- 9.17 The consent holder shall provide easements in gross over all stormwater infrastructure located outside of legal road or utility reserve areas to be vested with Council.
- 9.18 The consent holder shall submit an Engineering Design Report to the CCC 3 Waters and Waste Planning Unit and Resource Consents Unit for acceptance. The Engineering Design report shall demonstrate how the design will meet all of the applicable standards and shall contain all of the plans, specifications and calculations for the design and construction of all stormwater infrastructure and mitigation systems.
- 9.19 The designer of the surface water management system shall provide a report which identifies all overland flow paths proposed in the event of infiltration system failure or storm events that exceed the capacity of the system. All overland stormwater flow paths are to be identified and protected by easement if required.

- 9.20 The consent holder shall provide as-built plans of the surface water management systems and facilities and confirm that they have been constructed in accordance with the approved plans and comply with the IDS, particular Part 3: Quality Assurance and Part 12: As-Builts.
- 9.21 A landscape plan of the proposed stormwater facilities and their buffers shall be submitted for acceptance by the Council's Resource Consents Unit. Landscaping required by this condition is to be carried out in accordance with the approved plan at the consent holder's expense. The consent holder shall maintain all planting for a minimum of 24 months from the time of issue of the Section 224 Certificate.
- 9.22 The consent holder shall operate and maintain surface water mitigation facilities and infrastructure to vest into Council for a Defects Liability Period of 24 months following the issue of the Section 224(c) certificate in accordance with the provisions of NZS 3910:2013.
- 9.23 No more than 90 days prior to the expiry of the Defects Liability Period, hydraulic conductivity testing of the soil adsorption basin(s) shall be undertaken and supervised by a suitably qualified consultant with the results submitted to the Senior Stormwater Planning Engineer, 3 Waters and Waste Unit for acceptance. Median infiltration test results shall be within the range of 50mm-300mm per hour, with no single test result less than 30mm per hour. Should that range not be achieved, the consent holder shall undertake all necessary works to achieve the required infiltration rate, at no cost to Council.
- 9.24 A Maintenance and Operations manual for all surface water management and mitigation facilities shall be provided and shall form part of the Resource Consents and 3 Waters Planning Unit acceptance. This manual is to include a description of the activity, the design assumptions, maintenance schedule and monitoring requirements.

10. Stormwater (Lot 28 - Stage 1 Only)

- 10.1 Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.
- 10.2 The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDG to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

11. Access Construction Standards

- 11.1 The access formation shall be designed and constructed in accordance with the CCC Infrastructure Design Standard. Physical works shall not commence until a Council engineering officer confirms that the Design Report, Plans and Design Certificate complying with clause 3.3.1 of the IDS and the Contract Quality Plan and Engineer's Review Certificate complying with clause 3.3.2 has been received by Council.

Advice note: This condition is relevant to Lots 29, 33-39

12. Street Lighting

- 12.1 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

13. Engineering Plans

- 13.1 Engineering plans for the construction of the new road(s), shared accesses, street lighting, drainage, sediment control, water supply, earthworks, landscaping and tree planting shall be lodged with the Subdivisions Engineer and approved prior to the commencement of any physical works. All works are to be in accordance with Council's Infrastructure Design Standard.

- 13.2 Engineering works are to be installed in accordance with the approved plans.

14. Transport

- 14.1 A 2.5 metre wide shared path is to be constructed on Lot 102 and shall link to the path on Shands Road.

- 14.2 Road safety audits shall be undertaken as part of the detailed engineering design report and post-construction by a suitably qualified independent traffic engineer.

Advice note: There may be changes required to the road design as a result of the recommendations of the road safety audit.

- 14.3 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

15. Greenspace

Reserve Landscape Plans

- 15.1 Landscape Plans for Reserves (Lots 101 and 102 (Stage 1) 42, 43, 44, 45, 46, 47, 54 100 (Stage 2)) are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.

Advice Note – Where the Consent Holder has applied to vest assets as detailed on Accepted Landscape Plans, but the Asset and Network Unit (Parks) have not agreed to the value of the assets being credited against the Reserve Development Contributions or to reimburse the value of the assets to the Consent Holder, then the Consent Holder may vest the assets at their own expense, with the agreement of the Council's Parks Unit.

- 15.2 The Landscape Plans are to provide sufficient detail to confirm compliance with the requirements of the IDS, the CSS, and the WWDG: 2003. All landscaping required by this condition is to be carried out in accordance with the accepted plan(s) at the Consent Holder's expense, unless otherwise agreed.

- 15.3 The Consent holder shall maintain plants on Reserve Lots 42, 43, 44, 45, 46, 47, 54, 100, 101 and 102 for the **24 months** Establishment Period (Defects Maintenance), until a final inspection and acceptance of the landscaping by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes (current version).

- 15.4 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of plants/trees and the works undertaken during the Establishment Period. The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version).

- 15.5 The relevant Council Unit staff may carry out an inspection of the reserve plants/trees after the first **6-12 months**, and a final inspection will be carried out at the end of the **24 month** Establishment Period (Defects Maintenance). Where it is not possible to determine the condition of plants/trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined.

- 15.6 The Consent holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to replace and replant all plants/trees on reserves. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **12/24 months** for the replacement planting(s), as required (e.g. in a situation where 50% or more of the landscaping is not accepted). The bond shall be released after the plants and trees have been inspected and Accepted by the relevant Council Parks Operations staff.

- 15.7 Any replacement plantings and establishment period required due to plants/trees not being accepted are to be carried out at the Consent Holder's expense.

Street Tree Landscape Plans

- 15.8 Street tree landscape plans are to be submitted to the Asset and Network Unit (Parks) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.
- 15.9 The Landscape Plan(s) are to provide sufficient detail to confirm compliance with the requirements of the IDS (current version) and the CSS (current version).
- 15.10 The Consent Holder shall maintain the street trees for the **24 months** Establishment Period (Defects Maintenance) until final inspection and acceptance of the trees by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes.
- 15.11 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of the trees and the works undertaken during the Establishment Period (Defects Maintenance). The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested. (Refer sample report: *Landscape Construction Monthly Establishment Report*, CSS, Part 7 Landscape (current version).
- 15.12 The Team Leader Road Amenity & Asset Protection or his/her nominee may carry out an inspection of the trees after the first **6-12 months** and a final inspection will be carried out at the end of the **24 month** Establishment Period. Where it is not possible to determine the condition of trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined).
- 15.13 The Consent Holder shall enter into a separate bond with Council Asset & Network Unit (Parks) Team to the value of 50% of the cost to supply, replant and establish all street trees. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **24 months** for the trees(s), if required (e.g. in a situation where 50% or more of the trees are not accepted). The bond shall be released after the trees have been accepted by the Team Leader Road Amenity & Asset Protection or his/her nominee.
- 15.14 Any replacement plantings and establishment period required due to trees not being accepted are to be carried out at the Consent Holder's expense.

Final Completion / Handover (Reserves and Street Trees)

- 15.15 The Consent Holder shall submit, the required completion documentation in accordance with IDS Part 2:2.12 Completion of Land Development Works and the Quality Assurance System to provide evidence that the work is completed in accordance with the agreed standards and conditions of this consent. This is to be submitted, on completion of the **24 month** Establishment Period, prior to final inspection for formal handover to Council and release of the Establishment Bond.

As – Builts (Reserves and Street Trees)

- 15.16 The Consent Holder shall submit As-Built plans for any landscape improvements on land to be vested as reserve and for any street trees, in accordance with IDS, Part 12 As-Builts records and validated **before the s224 certificate is issued**.

16. Electricity Transmission (66kV lines)

- 16.1 The detailed design for the new road over proposed Lot 60 and 61 in the vicinity of the existing 66kV electricity distribution lines shall demonstrate compliance with the New Zealand Electrical Code of Practice for Electrical Safe Clearance Distances 34:2001 (NZECP34:2001).
- 16.2 The following consent notice shall be registered on the titles of Lots 7, 8, 16 and 17 to ensure ongoing compliance with consent conditions:

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kv overhead powerlines and 10m from the tower foundations.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

17. Electricity Transmission (220kV transmission line)

Earthworks

- 17.1 No excavation or disturbance of the land around the National Grid Towers; shall:
- Exceed a depth greater than 300mm within 6 metres of the outer edge of the visible foundations of the tower; or
 - Exceed a depth greater than 3 metres between 6 metres and 12 metres of the outer edge of the visible foundation of the tower; or
 - Create an unstable batter.
- 17.2 No fill or material shall be stockpiled or deposited under the National Grid transmission lines so that the conductor to ground clearance is reduced to less than 8.0m.
- 17.3 The consent holder must ensure that the discharge of dust and/or particulate matter from the activities authorised by this consent do not create any dust hazard or nuisance to the National Grid transmission lines, including support structures. A dust hazard or nuisance will occur if;
- There is visible evidence of suspended solids in the air; and/or
 - There is visible evidence of suspended solids traceable from a dust source (from the site works) settling on the transmission lines and/or support structures.

Mobile Plant

- 17.4 All machinery and mobile plant operated in association with the works shall maintain a minimum clearance distance of 4 metres from the National Grid transmission lines at all times.
- 17.5 A warning sign must be clearly displayed at the operator position on any mobile plant stating "WARNING, KEEP 4M MINIMUM CLEARANCE FROM TRANSMISSION LINES AT ALL TIMES".

Important Note: For specific clearance restrictions, refer to the BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020."

People

- 17.6 All people working on site, must maintain a safe separation distance of at least 6 metres between themselves (including any tools they are carrying) and the conductors (wires) of any National Grid transmission lines at all times.

Stormwater

- 17.7 The consent holder must ensure that changes to the stormwater drainage patterns and runoff characteristics arising from the works do not result in adverse effects on the foundations of any National Grid support structure.

Vegetation planted prior to s.224(c) approval

- 17.8 Any proposed new trees or vegetation within 12m either side of the centreline of the National Grid transmission must not exceed 2 metres in height at full maturity; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.9 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line, must be setback sufficiently to ensure the tree cannot fall within 4 m of the lines; and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Construction Management Plan

- 17.10 Prior to the commencement of physical site works, the consent holder shall prepare and submit to the Council for information, a Construction Management Plan (CMP) to ensure the protection of the National Grid transmission lines. The CMP must be given to Transpower NZ Ltd for its certification at least 20 working days prior to being submitted to the Council.

Note: The CMP should be sent to Transpower at transmission.corridor@transpower.co.nz

- 17.11 The CMP must include the following (but is not limited to):
- The name, experience and qualifications of the person/s nominated by the consent holder to supervise the implementation of, and adherence to, the CMP.
 - Details of the contractor's liability insurance held to cover any costs, direct or indirect, associated with any damage to the National Grid transmission lines, directly or indirectly caused by works undertaken to give effect to this consent.

- c) Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34: 2001) or any subsequent revision of the code; and the recommendations within the Electrical Clearance Report, "BROMLEY-ISLINGTON A Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020"; including (but not limited to) those relating to:
 - i) Excavation and Construction near Towers (Section 2);
 - ii) Ground to conductor clearances (Section 4);
 - iii) Mobile Plant to conductor clearances (Section 5); and
 - iv) People to conductor clearances (Section 9).
- d) Details of any areas that are "out of bounds" during construction and/or areas within which additional management measures are required, such as fencing off, entry and exit hurdles, maximum height limits, or where a safety observer may be required (a safety observer will be at the consent holder's cost.
- e) Demonstrate how the effects of dust (including any other material potentially resulting from construction activities able to cause material damage beyond normal wear and tear) on the transmission lines will be managed;
- f) Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures.
- g) Details of proposed contractor training for those working near the transmission lines.

17.12 All works/activities are to be undertaken in accordance with the approved CMP.

Consent Notice

- 17.13 All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).
- 17.14 No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.
- 17.15 No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.
- 17.16 Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 17.17 Conditions 17.13-16 (inclusive) shall be the subject of a consent notice on the title for proposed Lots 28, 30, 31, 32 and 33 – 40 (inclusive).

Advice notes:

- a) *Transpower NZ Ltd has a right to access its existing assets under s23 of the Electricity Act 1992. Lot design must not preclude or obstruct this right of access. It is an offence under s163(f) Electricity Act to intentionally obstruct any person in the performance of any duty or in doing any work that the person has the lawful authority to do under s23 of the Electricity Act 1992.*
- b) *For specific clearance restrictions, refer to the "BROMLEY-ISLINGTON-A, Report on clearances for Industrial Subdivision at 320 Shands Road and 637 Main South Road, Hornby prepared by Lumen Consulting, reference Job No. TLE17923, dated August 2020".*

- c) Lots 42-45 (inclusive) and Lot 100 to be vested in the Christchurch City Council as Local Purpose (Utility) Reserve must not be developed with amenity planting or fences, structures, etc. that prevent Transpower obtaining practical access to transmission line support towers.
- d) Access to Transpower's transmission line support tower #67 of the BRY-ISL-A located on Lot 100 must be maintained free of restriction from the east – via the new road extension south of Quadrant Drive and to the south of Lots 31 & 32.

18. Earthworks

18.1 Earthworks shall be carried out in accordance with approved plans 19 to 23.

The earthworks and construction work shall be under the control of a nominated and suitably qualified engineer.

18.2 The Erosion and Sediment Control Plan shall show the positions of all stockpiles on site. Temporary mounds shall be grassed or covered to prevent erosion until such time as they are removed.

Advice note: Topsoil shall not be worked excessively, to protect the integrity of the soil microbes.

18.3 All filling and excavation work shall be carried out in accordance with an Environmental Management Plan (EMP) which shall include an Erosion and Sediment Control Plan (ESCP). Unless approved as part of a separate ECan resource consent for stormwater discharge or ECan resource consent for excavation/filling the ESCP will require formal acceptance by Christchurch City Council's Subdivision Engineer (email to rcmon@ccc.govt.nz) prior to any work starting on site. The ESCP shall be designed by a suitably qualified person and a design certificate (on the Infrastructure Design Standard Part 3: Quality Assurance Appendix IV template <https://www.ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/IDS/IDS-Part-03-Quality-Assurance-V3-September-2016.PDF>) supplied with the ESCP for acceptance at least 5 days prior to the works commencing.

18.4 The best practice principles, techniques, inspections and monitoring for erosion and sediment control shall be based on ECan's Erosion and Sediment Control Toolbox for Canterbury <http://esc Canterbury.co.nz/>. The ESCP shall include (but is not limited to):

- The identification of environmental risks including erosion, sediment and dust control, spills, wastewater overflows, dewatering, and excavation and disposal of material from contaminated sites;
- A site description, i.e. topography, vegetation, soils, etc;
- Details of proposed activities;
- A locality map;
- Drawings showing the site, type and location of sediment control measures, on-site catchment boundaries and off-site sources of runoff;
- Drawings and specifications showing the positions of all proposed mitigation areas with supporting calculations if appropriate;
- Drawings showing the protection of natural assets and habitats;
- A programme of works including a proposed timeframe and completion date;
- Emergency response and contingency management;
- Procedures for compliance with resource consents and permitted activities;
- Environmental monitoring and auditing, including frequency;
- Corrective action, reporting on solutions and update of the EMP;
- Procedures for training and supervising staff in relation to environmental issues;
- Contact details of key personnel responsible for environmental management and compliance.

Note: IDS clause 3.8.2 contains further detail on Environmental Management Plans. The EMP may include the Remedial Action Plan.

18.5 The accepted ESCP shall be implemented on site over the construction phase earthworks, and any earthworks for remediation if required. No earthworks shall commence on site until:

- The contractor has received a copy of all resource consents and relevant permitted activity rules controlling this work
- the ESCP has been installed.
- an Engineering Completion Certificate (IDS – Part 3, Appendix VII), signed by an appropriately qualified and experienced engineer, is completed and presented to Council.

This is to certify that the erosion and sediment control measures have been properly installed in accordance with the accepted EMP.

- 18.6 Dust emissions shall be appropriately managed within the boundary of the property in compliance with the Regional Air Plan. Dust mitigation measures such as water carts or sprinklers shall be used on any exposed areas. The roads to and from the site are to remain tidy at all times.
- 18.7 Notify Christchurch City Council no less than ten working days prior to works commencing, (email to rcmon@ccc.govt.nz) of the earthworks start date and the name and contact details of the site supervisor.
- 18.8 Any change in ground levels shall not cause a ponding or drainage nuisance to neighbouring properties. All batters shall be formed within the applicant's property unless written permission is obtained from the affected landowner.
- 18.9 Any change in ground levels shall not affect the stability of the ground or fences on neighbouring properties.
- 18.10 The fill sites shall be stripped of vegetation and any topsoil prior to filling. The content of fill shall be clean fill.
- 18.11 All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for Earthfill for Residential Purposes NZS 4431:1989. At the completion of the work an Engineers Earthfill Report, including a duly completed certificate in the form of Appendix A of NZS 4431, shall be submitted to Council at rcmon@ccc.govt.nz for all lots within the subdivision that contain filled ground. This report shall detail depths, materials, compaction test results and include as-built plans showing the location and depth of fill and a finished level contour plan.
- 18.12 The consent holder shall submit a report and calculations detailing any filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties. Any retaining wall construction shall be included and certified as part of the Earthfill Report.

Note: Any retaining wall that exceeds 6m² is regarded as a building and requires a separate resource consent if not specifically addressed within the application supporting this consent.

Note: This report may be presented as part of the Design Report for the subdivision works under condition 1 (subdivision design report and QA).

- 18.13 Any areas of uncontrolled fill that are known, or may be found during subdivision construction, shall be removed and reinstated with controlled, compacted inert fill materials, generally in accordance with the requirements of NZS4431:1989 as a minimum standard. These areas shall be included in the records provided under the Earthfill Report in condition 11.

~~18.14 Provision shall be made for overland stormwater flows from the shallow alluvial feature of RS2095 to flow across the corners of Lots 29 and 33 and into the stormwater system at Lot 100. The secondary flow path should be protected by way of an easement in gross to the Council.~~

~~*Advice note: This condition is relevant for stages 1 and 2.*~~

- 18.15 All bared surfaces shall be adequately topsoiled and vegetated as soon as possible to limit sediment mobilisation.
- 18.16 Should the Consent Holder cease or abandon work on site for a period longer than 6 weeks, or be required to temporarily halt construction during earthworks, they shall at first take adequate preventative and remedial measures to control sediment discharge / run-off and dust emission, and shall thereafter maintain these measures for as long as necessary to prevent sediment discharge or dust emission from the site.

19. Health of Land

- 19.1 A Remedial Action Plan (RAP) shall be prepared Lots 1 – 40, 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 by a suitably qualified and experienced practitioner in the assessment and management of contaminated land. The RAP shall be prepared in general accordance with Contaminated Land Management Guidelines, No.1, Ministry for the Environment (revised 2011), and shall include (but not be limited to) a detailed discussion of the remedial

options available and the extent of remedial works required, the methods of validation and the necessary pre-remediation site management procedures (e.g. fencing, warning signs, stormwater diversion, etc), that will avoid, mitigate, or remedy any adverse effects of the remedial works on human health. If remediation works are to be staged, a Remedial Action Plan will address this.

- 19.2 At least 10 working days prior to the commencement of the remedial works, the RAP shall be submitted to Council for review and certification that it is within the scope of this consent and it meets the conditions of this consent.
- 19.3 The consent holder shall submit a Site Validation Report to Council, Attention: Team Leader Environmental Health, by way of email to rcmon@ccc.govt.nz no later than 20 working days following the completion of soil disturbance. The Site Validation Report shall include but not be limited to:
- a) Details of the project works completed
 - b) A site plan showing the location and volume of the completed earthworks and drawing of the 'as built' state of the site.
 - c) For soils imported to site; information on the soil source site and any sample results.
 - d) Documentation of any incidents and how they were resolved
 - e) The results of any sampling undertaken.
 - f) The soil guideline value that the site has been remediated to
 - g) Records of the disposal of material identified as containing concentrations of contaminants above background levels. The record shall include:
 - (i) The approximate location of the site where the contaminated material was found;
 - (ii) The name of the person and company that collected the contaminated material from the site;
 - (iii) The date of collection;
 - (iv) The destination of the material;
 - (v) A description of the material, including known contaminants; and
 - (vi) The volume of the material collected.
 - (vii) Evidence of that disposal to an authorised facility.
- 19.4 The Site Validation Report for Lots 1 – 40, Lots 52 and 53 and Reserve Lots 42 –47, 54, 100, 101, and Lots 60 – 63 shall be written in accordance with the Ministry for the Environment Guideline for Reporting on Contaminated Sites in New Zealand (revised 2011). If works are staged, the Site Validation Report will be provided for each stage.

20. Plans for Geodata Plot

- 20.1 As soon as practical after the Section 223 certificate has been issued the consent holder is to advise the handling officer that the digital dataset for the subdivision is available in Land online and can be used for creation of the parcels in Council's digital database.

21. As Built Plans

- 21.1 As built plans of stormwater retention/detention basins and swales are to be forwarded to the Subdivision Engineer together with capacity calculations to confirm that the works have been constructed in accordance with the engineering plan.

22. Filled Land

- 22.1 All filling is to be carried out using good quality inert engineering material free of organic, putrescible or hazardous components, and in accordance with the rules in Chapter 8.9 of the District Plan. Topsoil is to be stripped and stockpiled on the site for later spreading over the filled land. All filling shall be compacted in even layers using appropriate mechanical equipment and under the general control of a suitably qualified Engineer. A report is to be submitted to Council by the Engineer detailing the extent of the filling and the nature of the fill material utilised.

23. Telecommunications and Energy Supply

- 23.1 All lots shall be provided with the ability to connect to a telecommunications and electrical supply network at the boundary of the net area of each lot. Confirmation that the ducts or cables have been laid to the boundary of the net area is required.
- 23.2 The consent holder is to provide a copy of the reticulation agreement letter from the telecommunications network operator and a letter from the electrical energy network operator, or their approved agent to confirm capacity is available to the sites.

24. Right of Way Easements

24.1 The rights of way easements as set out on the application plan shall be duly granted or reserved.

25. Service Easements

25.1 The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.

25.2 Easements over adjoining land or in favour of adjoining land are to be shown in a schedule on the Land Transfer Plan. A solicitor's undertaking will be required to ensure that the easements are created on deposit of the plan.

26. Existing Easements over areas of Road to Vest

26.1 The portion of the existing easements that extend over the road to vest are to be surrendered.

27. Easements over Reserves

27.1 Easements over land that is to vest in the Council as reserve are to be shown on the survey plan in a Schedule of Easements. A solicitor's undertaking shall be provided to ensure that the easement is registered on the subject reserve at the time title is created. A section 223 certificate will not issue until such time as a section 239 certificate is issued by Council.

28. Existing easements under reserve to vest

28.1 If the Council requires the retention of existing easements over land that is to vest in the Council as Reserve a certificate pursuant to Section 239(2) of the Resource Management Act 1991 will be issued.

29. Easements in Gross

29.1 The legal instruments for easements in gross in favour of the Council are to be prepared by Council's consultant solicitor at the consent holder's cost. The consent holder's solicitor is to contact Anderson Lloyd Lawyers (Mike Kerr) requesting the preparation of the easement instruments. As built plans for the services covered by the easement are to be provided at Section 223 certification stage.

30. Road and/or Lane Names

30.1 The consent holder shall order and install the road's nameplates. The nameplates shall be designed and installed in accordance with the IDS and CSS.

30.2 The location of the nameplates shall be submitted to Council's Subdivision Engineer for approval prior to their installation.

Advice Note: Nameplates usually take six weeks to manufacture. The location of the nameplates can be submitted in a plan which identifies the road's landscaping and location of street lighting as required by this application. The consent holder is responsible for the cost of providing and installing the nameplates.

31. Amalgamations

31.1 The following amalgamation condition has been approved by Land Information New Zealand. The condition is to be included in the digital Title Plan dataset:

Stage 1:

"That Lot 14 hereon be transferred to the owner of Lot 1 DP 397987 (RT 391288) and one record of title be issued to include both parcels (CSN Request 1663316)

Stage 2:

That Lot 51 hereon and Lot 2 DP 436436 and Lot 3 DP 318553 (residue RT 944686) be held in the same record of title (CSN Request 1663316)"

32. Public Utility Sites

32.1 Any public utility site and associated rights of way easements and/or service easements required by a network operator are approved provided that they are not within any reserves to vest in the Council.

33. Consent Notice

Sewer – Lots 2 to 30 (Stage 1)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer – Lots 1, 31 to 40, 52 and 53 (Stage 2)

This property shall comply with the wastewater discharge restrictions and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

This property is to be served by a local pressure sewer unit comprising a pump (or pumps) and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drainlayer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for local pressure sewer units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel per pump.

The property owner will retain ownership of the local pressure sewer unit complete with pump(s), chamber and OneBox Control Panel(s). The property owner will be responsible for the operations and maintenance of the complete system.

Council shall have remote access to the IOTA OneBox Control via its IOTA OneBox portal to monitor and control (when required) the pump (s) as part of the local pressure sewer catchment.

Sewer (Stage 2 – Lot 51 only)

This property shall comply with the wastewater discharge restrictions as directed by Christchurch District Plan and shall be limited to a daily average sewage flow of no more than 0.09 litres per second per hectare.

Limited capacity is available to service this site into the local pressure sewer system established for the surrounding development and which discharges into Quadrant Drive. Wastewater capacity approval shall be obtained before a sewer connection will be accepted for this site and may require a new connection to be made to Council infrastructure in Main South Road in accordance with Council's Infrastructure Design Standards, at the property owner's cost.

Stormwater – Stage 1 – Lots 2 to 30

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater - Lots 1, 31-40, 52 and 53 (Stage 2)

Stormwater runoff from roofs of all buildings within this allotment shall be captured and disposed of via rapid soakage infiltration systems that are fully sealed and separated from other stormwater runoff. The rapid soakage infiltration systems shall be designed to dispose of the critical 2 percent annual exceedance probability storm event.

Stormwater – Lot 28 – Stage 1

Lot 28 shall provide first flush stormwater treatment and rapid soakage systems within the site at the time of building consent.

The following consent notice shall be registered on the title of Lot 28 to ensure ongoing compliance with consent conditions:

Stormwater runoff from hardstanding areas and roading within this allotment shall be captured, treated and disposed of via private onsite treatment and soakage systems. The stormwater management and disposal system shall be sized to capture, contain and dispose of the critical 2 percent annual exceedance probability storm. Unless approved by the Council Engineer, treatment of the first flush runoff shall be via one of the following systems:

- A raingarden designed in accordance with CCC's Rain Garden Design Construction and Maintenance Manual 2015;
- A soil adsorption basin or sedimentation basins + wetland treatment train designed in accordance with WWDG to treat a volume of runoff equal to that generated from 25mm rainfall depth
- One of the following proprietary treatment devices designed to treat the flow generated from a 5mm/hr intensity rainfall event:
 - Hynds UpFlo Filter with CPZ Media
 - Stormwater 360 Stormfilter with ZPG Media
 - Stormwater 360 Filterra
 - SPEL Hydrosystem
 - SPEL Spelfilter

Electricity Transmission – Lots 7, 8, 16 and 17 (Stage 1)

All new buildings shall comply with the minimum setback of 10m either side of the centreline of 66kv overhead powerlines and 10m from the tower foundations.

Electricity Transmission – Lots 28, 30 (Stage 1)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Electricity Transmission Lots 31, 32 and 33-40 (Stage 2)

All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the

New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code. (Note: The National Grid Owner Transpower New Zealand Limited can assist in determining compliance).

No buildings or structures shall be located within 12m of the centreline of the National Grid Yard; except for non-conductive fencing.

No buildings or structures shall be located within 12m of any outer visible edge of any National Grid support structure; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

Any proposed new trees or vegetation outside of 12m either side of the centreline of the National Grid transmission line must be setback sufficiently to ensure the tree cannot fall within 4 m of the conductors / lines; and comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

34. Goods and Services Taxation Information

34.1 The subdivision will result in non-monetary contributions to Council in the form of land and/or other infrastructure that will vest in Council. Council's GST assessment form is to be completed to enable Council to issue a Buyer Created Tax Invoice.

35. Lapsing of Consent

35.1 The period within which this consent may be given effect to shall be 5 years from the date on which consent was granted. The consent will be given effect to when the survey plan has been certified pursuant to Section 223 of the Resource Management Act 1991.

Advice Note:

The lapse date of the consent remains unchanged, i.e. 11 February 2027. The consent will lapse on this date unless it is given effect to before then.

Reported and recommended by: Leashelle Miller, Planning Technician

Date: 07/11/2022

Decision

That the above recommendations be adopted for the reasons outlined in the report.

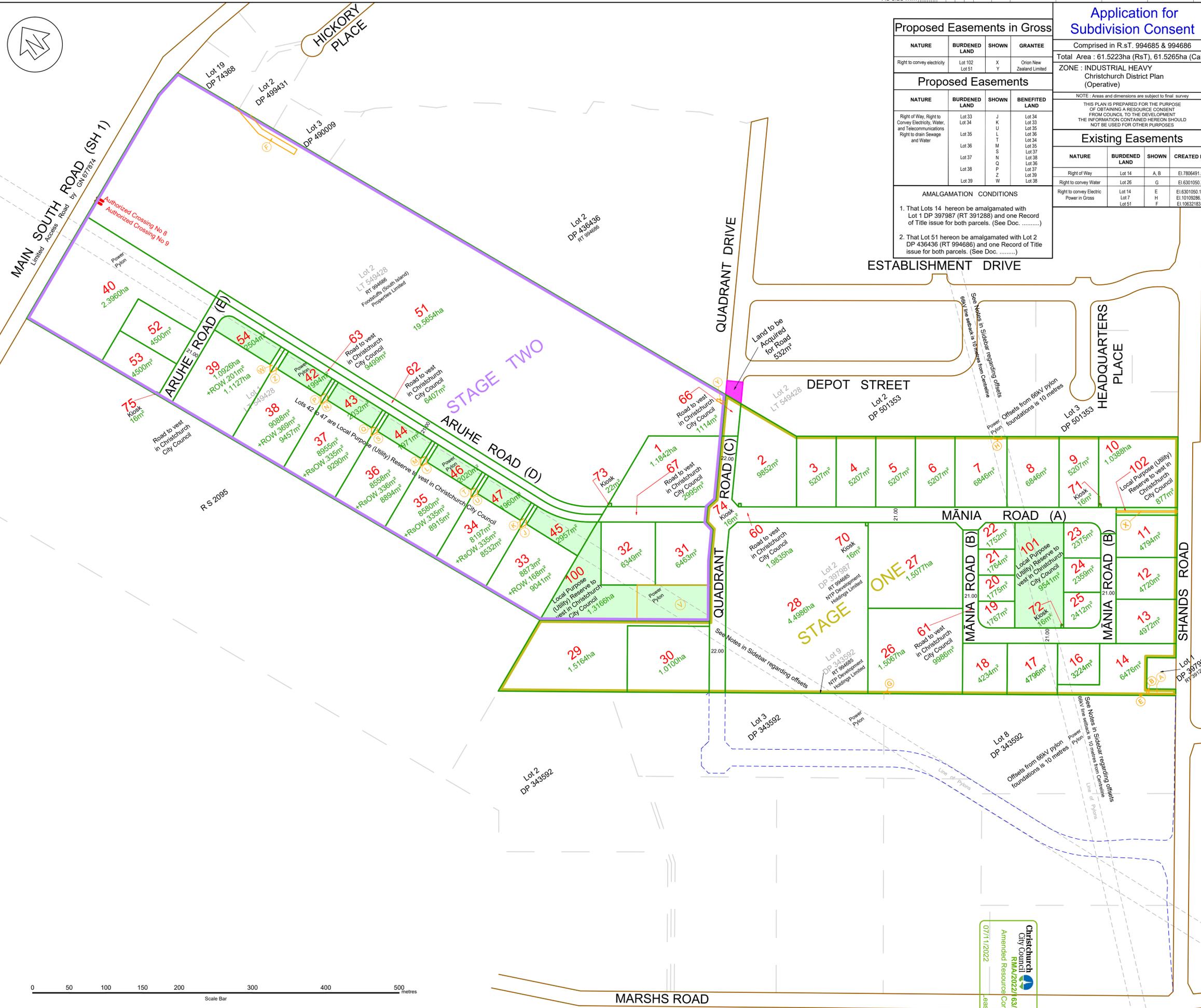
Delegated officer:



Marilyn Regnault

Principal Advisor Resource Consents

07/11/2022 12:24 pm



Proposed Easements in Gross			
NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to convey electricity	Lot 102 Lot 51	X Y	Orion New Zealand Limited

Proposed Easements			
NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications	Lot 33 Lot 34 Lot 35 Lot 36 Lot 37 Lot 38 Lot 39	J K L M N O P Q R Z	Lot 34 Lot 33 Lot 35 Lot 36 Lot 34 Lot 35 Lot 37 Lot 38 Lot 39
Right to drain Sewage and Water	Lot 33 Lot 34 Lot 35 Lot 36 Lot 37 Lot 38 Lot 39	J K L M N O P Q R Z	Lot 34 Lot 33 Lot 35 Lot 36 Lot 34 Lot 35 Lot 37 Lot 38 Lot 39

AMALGAMATION CONDITIONS

- That Lots 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)
- That Lot 51 hereon be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)

Application for Subdivision Consent

Comprised in R.s.T. 994685 & 994686

Total Area : 61.5223ha (RsT), 61.5265ha (Calc)

ZONE : INDUSTRIAL HEAVY
Christchurch District Plan (Operative)

NOTE: Areas and dimensions are subject to final survey

THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements			
NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14	A, B	EI.7806491.5
Right to convey Water	Lot 26	G	EI.6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7 Lot 51	E H F	EI.6301050.11 EI.10109286.1 EI.10632183.2

Notes:

NOTE: Lots 70 to 75 are Electricity Kiosk sites.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

- Offsets from 220kV pylon foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
- Offsets from the 66kV pylon foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the pylon bases where it widens out to be 10 metres from the edges of the pylon foundations.
- A Power Easement will be provided over Lots 30 and 101 if required by Orion.

There is no Lot 15 on this plan.

Christchurch City Council
RMA/2022/163/A
Amended Resource Consent Plan
07/11/2022 Leashelle Miller

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
P	Remove Esmt D in Lot 33, Minor corrections	rksq	28.10.2022
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed	Survey Date:
Drawn	Bob Greening	18.11.2019		
Drq. Chk	Bruce Sinclair	18.11.2019		
Proj. Mgr	Jerry Schutte			
Design Review				
Approved				

Client: **NGĀI TAHU Property**

Project Title: **NTPDHL Industrial Park**
320 Shands Road & 637 Main South Road

Drawing Title: **Proposed Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428.**

Scales: 1:2500 [A1] 1:5000 [A3]

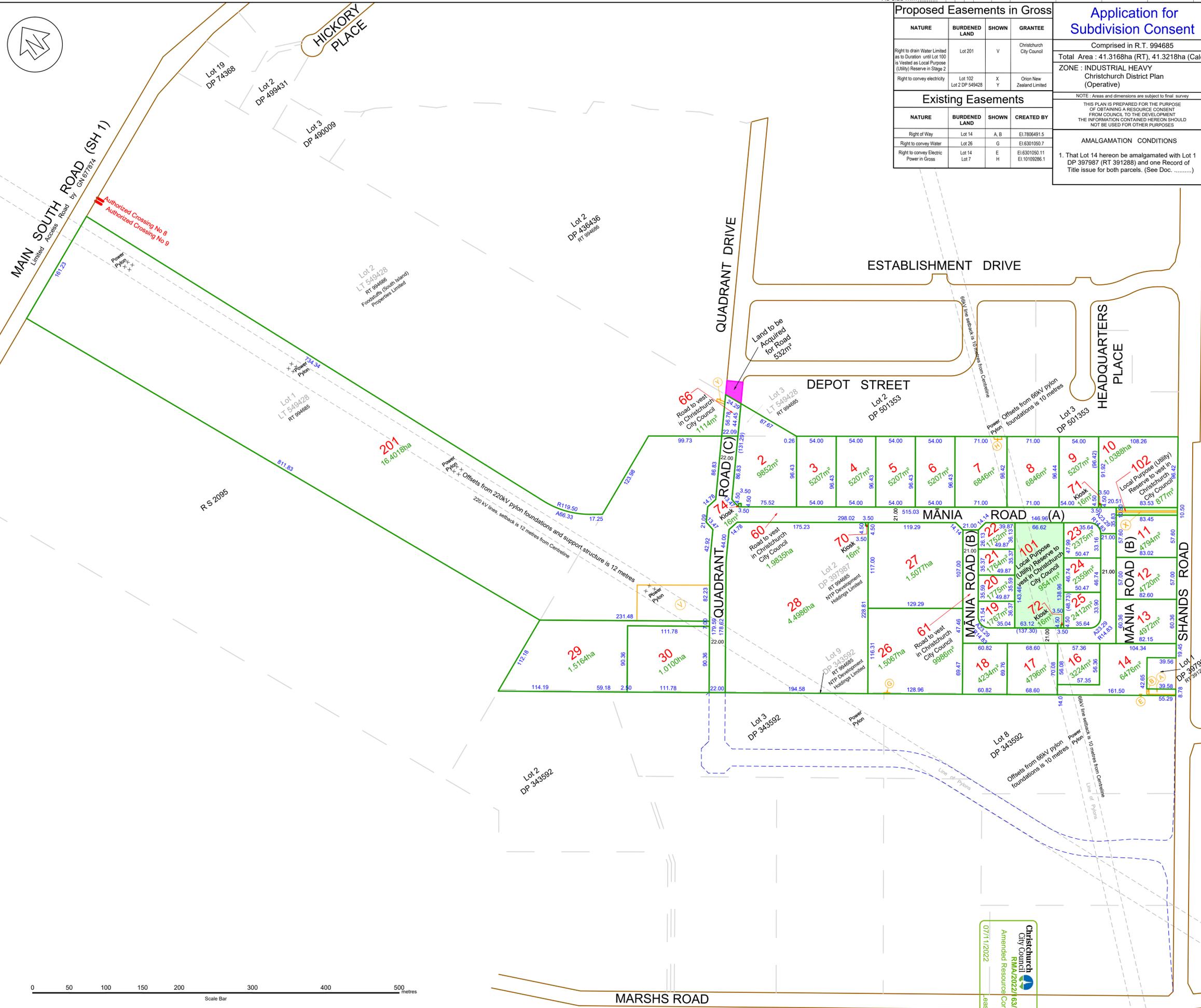
Project No.	Set No.	Sht No.	Rev.
442038	C1	1	P

eliot sinclair



Christchurch City Council
RMA/2022/163/A
Amended Resource Consent Plan
07/11/2022
Leashelle Miller

FOR CONSENT



Original 0 10 30 50 100 150 200 300
A1 size mm

Proposed Easements in Gross			
NATURE	BURDENED LAND	SHOWN	GRANTEE
Right to drain Water Limited as to Duration until Lot 100 is Vested as Local Purpose (Utility) Reserve in Stage 2	Lot 201	V	Christchurch City Council
Right to convey electricity	Lot 102 Lot 2 DP 549428	X Y	Orion New Zealand Limited

Existing Easements			
NATURE	BURDENED LAND	SHOWN	CREATED BY
Right of Way	Lot 14	A, B	EI 7805491.5
Right to convey Water	Lot 26	G	EI 6301050.7
Right to convey Electric Power in Gross	Lot 14 Lot 7	E H	EI 6301050.11 EI 10109286.1

Application for Subdivision Consent

Comprised in R.T. 994685

Total Area : 41.3168ha (RT), 41.3218ha (Calc)

ZONE : INDUSTRIAL HEAVY
Christchurch District Plan (Operative)

NOTE : Areas and dimensions are subject to final survey

THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT OF THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

AMALGAMATION CONDITIONS

1. That Lot 14 hereon be amalgamated with Lot 1 DP 397987 (RT 391288) and one Record of Title issue for both parcels. (See Doc.)

Notes:

NOTE: Lots 70 to 72 and 74 are Electricity Kiosks.

Service Easements to be created as Required.

OFFSET PROVISIONS FOR HIGH VOLTAGE LINES

- Offsets from 220kV Pylon Foundations and support structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the pylon bases and support structures where it widens out to be 12 metres from the edges of the said features.
- Offsets from 66kV Pylon Foundations is 10 metres. Therefore the Corridor which contains the 66kV wires is 20 metres wide except at the Pylon Bases where it widens out to be 10 metres from the edges of the Pylon Bases.
- A Power Easement will be provided over Lots 30 and 101 if required by Orion.

There is no Lot 15 on this plan.

Christchurch City Council
RMA/2022/163/A
Amended Resource Consent Plan
07/11/2022 Leashelle Miller

Page 2 of 6

Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
P	Remove Esmt D in Lot 33, Minor Corrections	rksq	28.10.2022
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1 (St 2); enlarge Lot 74; Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed	Survey Date
Drawn	Bob Greening	18.11.2019		
Proj. Mgr	Bruce Sinclair	18.11.2019		
Design Review				
Approved				

Client: **NGĀI TAHU Property**

Project Title: **NTPDHL Industrial Park**
320 Shands Road & 637 Main South Road

Drawing Title: **STAGE One Subdivision of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 & 3 LT 549428**

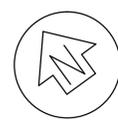
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Project No.	Set No.	Sht No.	Rev.
442038	C1	2	P



Christchurch City Council
RMA/2022/163/A
Amended Resource Consent Plan
07/11/2022 Leashelle Miller

FOR CONSENT



Application for Subdivision Consent

Comprised in Pts R.s.T. 994685 & 994686
 Total Area : 36.6073ha (RsT), 36.6065ha (Calc)

ZONE : INDUSTRIAL HEAVY
 Christchurch District Plan
 (Operative)

NOTE: Areas and dimensions are subject to final survey
 THIS PLAN IS PREPARED FOR THE PURPOSE OF OBTAINING A RESOURCE CONSENT FROM COUNCIL TO THE DEVELOPMENT THE INFORMATION CONTAINED HEREON SHOULD NOT BE USED FOR OTHER PURPOSES

Existing Easements to be Surrendered

NATURE	SERVIENT TENEMENT	SHOWN	CREATED BY
Right to drain Water in Gross	Lot 100	V	See Stage One
Right to convey Electric Power in Gross	Lot 51 Lot 51	F Y	EL10632183.2 See Stage One

Proposed Easements

NATURE	BURDENED LAND	SHOWN	BENEFITED LAND
Right of Way, Right to Convey Electricity, Water, and Telecommunications Right to drain Sewage and Water	Lot 33	J	Lot 34
	Lot 34	K	Lot 33
	Lot 35	U	Lot 35
	Lot 36	L	Lot 36
	Lot 37	T	Lot 34
	Lot 38	M	Lot 35
	Lot 39	S	Lot 37
	Lot 38	N	Lot 38
	Lot 39	Q	Lot 36
	P	Lot 37	
	Z	Lot 39	
	W	Lot 38	

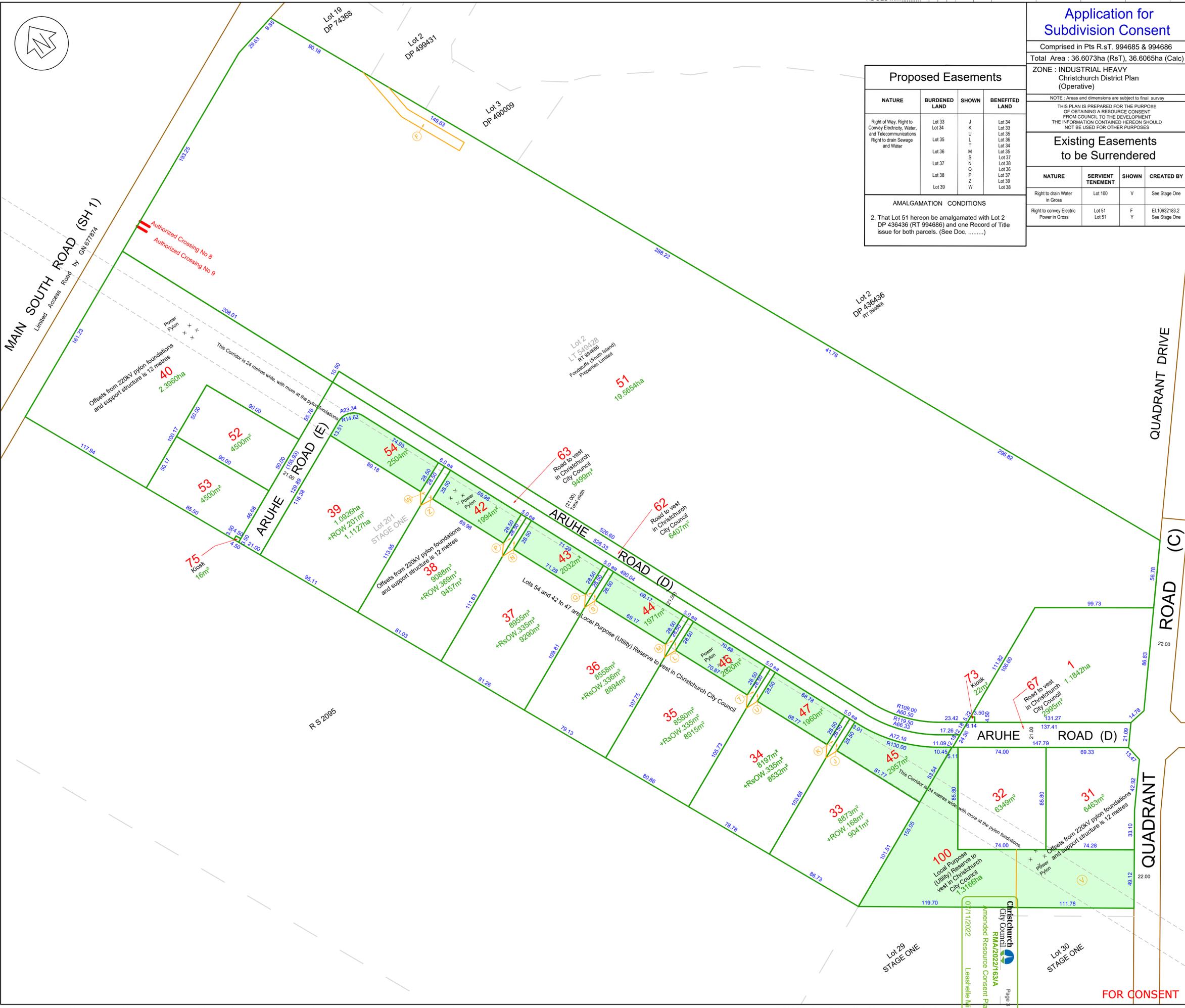
AMALGAMATION CONDITIONS

2. That Lot 51 herein be amalgamated with Lot 2 DP 436436 (RT 994686) and one Record of Title issue for both parcels. (See Doc.)

Christchurch City Council
 RMA/2022/163/A
 Amended Resource Consent Plan
 07/11/2022 Leashelle Miller

Notes:

- NOTE: Lots 73 and 75 are Electricity Kiosks.
 Service Easements to be created as Required.
 OFFSET PROVISIONS FOR HIGH VOLTAGE LINES
 1. Offsets from 220kV Pylon Foundations and Support Structures is 12 metres. Therefore the Corridor which contains the 220kV wires is 24 metres wide except at the Pylon Bases and Support Structures where it widens out to be 12 metres from the edge of the said features.



Rev.	Description	Drawn	Date
N	Add Lots 52-4; remove St3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
P	Remove Easement D in Lot 33, Minor Corrections	rksq	28.10.2022
J	Add Lots 46, 47; add extra Leg-ins Lots 34, 35, 36, 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 15 - 17.	rksq	5.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Proj. Mgr	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Design Review	Jerry Schutte		Calibration:	
Approved			Origin of Levels:	
			Datum:	

Client
 NGĀI TAHU Property

Project Title
 NTPDHL Industrial Park
 320 Shands Road & 637 Main South Road

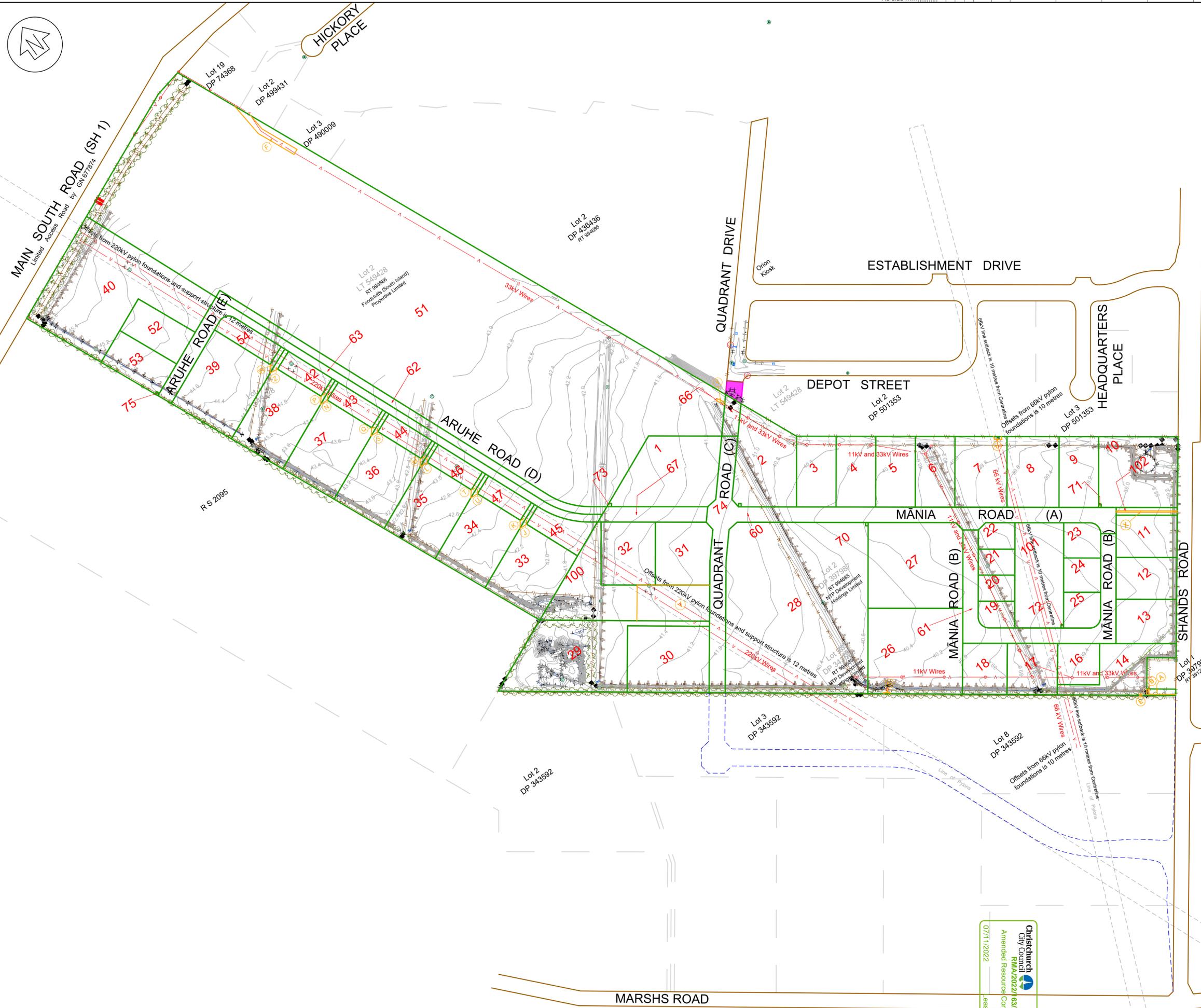
Drawing Title
 STAGE Two Subdivision of
 Lot 2 LT 549428 and Lot 201 Stage One

Scales
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Project No.	Set No.	Sht No.	Rev.
442038	C1	3	P



FOR CONSENT



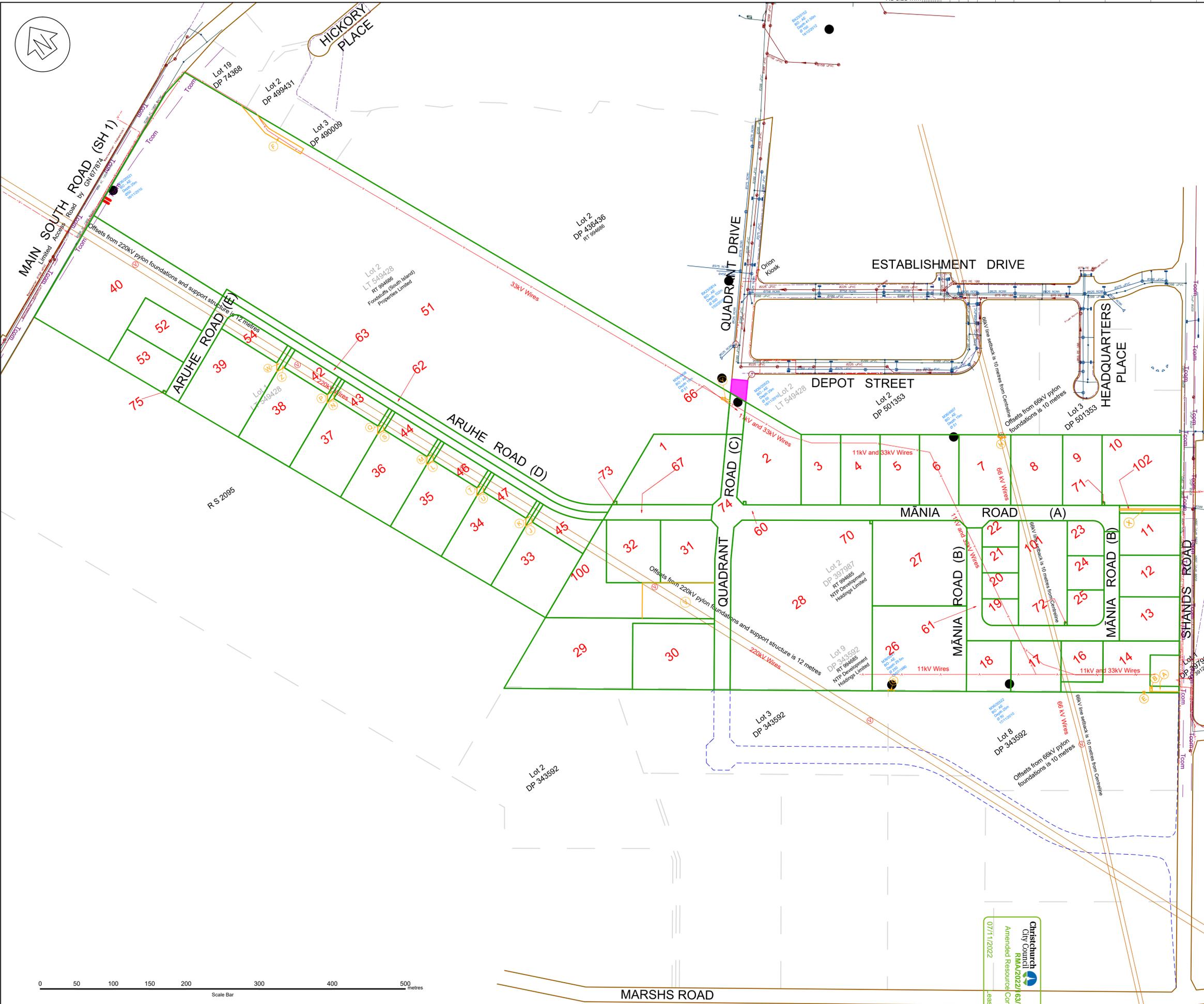
Rev.	Description	Drawn	Date
J	Add Lots 46, 47; add Leg-ins Lots 34, 35, 36 & 37	rksq	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428; arcs Lots 19,23,25	rksq	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksq	13.10.2020
M	Relocate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
P	Remove Esmt D in Lot 33, Minor Corrections	rksq	28.10.2022

Designed	Name	Date	Surveyed:	Survey Date:
	TMCL	-	M.Oates & M Petty	Apr. Aug 2019
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Drq. Chk	Bruce Sinclair	18.11.2019	Location:	Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	CDD
Design Review		Date	Origin of Levels:	B87T (BM0380) Capped in grass berm Chr Foremans/Halswell Jctn Rds R.L.42.188m Datum: CDD
Approved		Date		

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Topographical Details for Proposed Subdivision of 320 Shands Rd etc.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	4	P

**eliot
sinclair**

FOR CONSENT

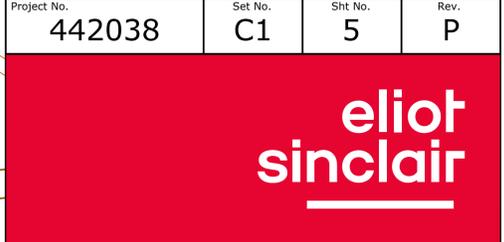


Notes:

Rev.	Description	Drawn	Date
J	Add Lots 46, 47; Add Leg-ins Lots 34, 35, 36 & 37	rksg	24.04.2020
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksg	12.06.2020
L	Amend Boundaries of Lots 14, 16, 17.	rksg	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksg	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9	rksg	19.8.2021
P	Remove Esmt D in Lot 33, Minor Corrections	rksg	28.10.2022

Designed	Name	Date	Surveyed:	Survey Date:
	TMCL	-	M.Oates & M.Petty	Apr. Aug 2019
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Drng. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	CDD
Design Review		Date	Origin of Levels:	B87T (BM0380)
Approved		Date	Capped in grass berm	Cnr Foremans/Halswell Jctn Rds
			R.L.42.188m	Datum: CDD

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Existing Services for Proposed Subdivision of 320 Shands Rd etc.		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	5	P



FOR CONSENT



Notes:

Aerial Photography used in this plan has been provided by Land Information New Zealand and is used courtesy of Creative Commons Licence 4.0.

Rev.	Description	Drawn	Date
L	Amend Boundaries of Lots 14, 16, 17	rksq	13.10.2020
M	Re-locate Lot 73 to Lot 1; enlarge Lot 74; add Esmt Y	rksq	29.03.2021
N	Add Lots 52-4; remove St 3 & Lot 64; amend Lots 38-9.	rksq	19.8.2021
P	Remove Esmt D in Lot 33, Minor Corrections	rksq	28.10.2022
E	Road/Lot 28 amended 614.45m from Shands Rd	rksq	9.12.2019
K	Add Stage 3, Lots 74-75, LT 549428, arcs Lots 19,23,25	rksq	12.06.2020

Designed	Name	Date	Surveyed:	Survey Date:
Drawn	Bob Greening	18.11.2019	Coord System:	NZGD 2000
Dr. Chk	Bruce Sinclair	18.11.2019		Mt Pleasant 2000
Proj. Mgr	Jerry Schutte		Calibration:	
Design Review		Date	Origin of Levels:	
Approved		Date	Datum:	

Client	NGĀI TAHU Property		
Project Title	NTPDHL Industrial Park 320 Shands Road & 637 Main South Road		
Drawing Title	Aerial Photo Prop. Subdn of Lot 2 DP 397987, Lot 9 DP 343592 & Lots 1 - 3 LT 549428		
Scales	1:2500 [A1] 1:5000 [A3]		
Project No.	Set No.	Sht No.	Rev.
442038	C1	6	P

Christchurch City Council
Amended Resource Consent Plan
07/11/2022



Report / Decision on a Non-notified Subdivision Consent Application

Sections 95A / 95B and 104 and 104C

Application Number: RMA/2022/1172
Applicant: Whatever It Takes 2003 Limited
Site address: 320 Shands Road, Hornby
Site area: 1.5077 ha
Legal Description: Lot 27 of proposed subdivision RMA/2022/163 being a subdivision of Lot 2 DP 397897
Zoning: Industrial Heavy
Overlays and map notations: South West Hornby Outline Development Plan

Activity Status - subdivision: Restricted Discretionary
Activity Status - land use: Restricted Discretionary

Description of Application: Two lot fee simple subdivision

The proposal

This application is to subdivide a fee simple title into two fee simple allotments. Subdivision consent RMA/2022/163 has been granted on 11 February 2022 for a 42 lot fee simple subdivision. This application further subdivides Lot 27 of RMA/2022/163. The net site areas for the proposed lots are 1.1392ha (Lot 1) and 3684m² (Lot 2).

Both allotments have street frontage and will be created vacant. Service easements are proposed in this application.

Description of site and existing environment

The application site and surrounding environment are described in section 2 of the AEE submitted with the application. I adopt the applicant's description.

Relevant rules and activity status

Christchurch District Plan

The site is zoned Industrial Heavy.

Land use rules

The proposal requires land use consent for a restricted discretionary activity under the following rule:

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
16.5.4.1.3 RD3	n/a	Any development within the area shown as 'rural wastewater irrigation area' on the outline development plan in Appendix 16.8.8 is classified as Restricted Discretionary Activity until: <ol style="list-style-type: none"> i. The full southern spine road between Main South Road and Shands Road (Marked as 'C' on the outline development plan) has been constructed and is open to the public; ii. Capacity upgrades have 	16.7.3.9.4 - Roading and access	Shall not be publicly notified.

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>commenced at the following intersections:</p> <p>A. Intersection of the southern spine road and Shands Road (marked as 'A' on outline development plan in Appendix 16.8.8).</p> <p>B. Intersection of the northern spine road and Shands Road (marked as 'B' on outline development plan in Appendix 16.8.8).</p> <p>The application is proposing development (industrial activities after the completion of the subdivision) prior to the full southern spine (to the extent shown in the ODP).</p>		

Subdivision rules

The proposal requires subdivision consent for a restricted discretionary activity under the following rules:

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
8.5.1.3 RD2	8.6.10 South West Hornby Area Outline Development Plan.	<p>Any subdivision within the area shown as "rural wastewater irrigation area" on the outline development plan at Chapter 16 Appendix 16.8.8. for the Industrial Heavy Zone (South West Hornby) shall not occur until the following works have been undertaken:</p> <p>i. The construction and opening for traffic of the full southern spine road between Main South Road and Shands Road (marked as 'C') on the outline development plan; and</p> <p>ii. the commencement of the physical construction works for capacity upgrades at both the following intersections –</p> <p>A. the intersection of the southern spine road and Shands Road (marked as 'A' on the outline development plan); and</p> <p>B. the intersection of the northern spine road and Shands Road (marked as 'B' on the outline development plan).</p> <p>The proposal does not comply with 8.6.10(a)(i) as the construction of Road C has not yet been open to traffic at the time of applying</p>	<p>8.7.4 - General matters</p> <p>8.7.5 - Additional matter - industrial zones</p> <p>8.8.3 - Roads</p>	8.4.1.1

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		for consent and upgrades to Intersection B has not yet commenced. Therefore, this activity is a restricted discretionary activity.		
8.5.1.3 RD2	8.6.8 Wastewater disposal	The proposed wastewater disposal does not comply as no wastewater capacity certificate was provided in the application.	8.7.4 - General matters 8.8.6 - Servicing	8.4.1.1

Rule 8.4.1.1 specifies that any application for a controlled or restricted discretionary subdivision consent shall not be publicly or limited notified (except in relation to restricted discretionary applications seeking access on to a State Highway).

National Environmental Standard

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) controls subdivision of land and soil disturbance where an activity on the Hazardous Activities and Industries List (HAIL) is being carried out or is more likely than not to have been carried out.

The site has been investigated as part of the underlying subdivision, RMA/2022/163, and all known areas with contamination above the NES standards have been remediated.

Effects on the environment and adversely affected persons [Sections 95D, 95E and 104(1)(a)]

Subdivision and Land Use

As a restricted discretionary activity the assessment of the effects of the subdivision and land use components are limited to the matters over which the Council has limited its discretion outlined in Chapters 8 and 16 of the Christchurch District Plan. In my opinion the effects of this proposal relate to general matters of subdivision, outline development plan and servicing.

General Matters of Subdivision

As a requirement of The Christchurch District Plan under Chapter 8, General Matters 8.7.4 have been assessed to determine the conditions of this consent. General matters include assessing criteria for subdivision design, transport networks, servicing and infrastructure, hazard constraints, open spaces, reserves and recreation spaces, natural and cultural values and consent notices. Specialist input from council staff and relevant experts have been obtained for servicing & infrastructure, natural hazards management assessments and conditions of consent have been recommended to meet the relevant criteria. This includes conditions for servicing & infrastructure. I consider that this application satisfies all requirements in Rule 8.7.4.

Outline Development Plan

The development creates non-compliances as outlined above which require assessment of Rules 8.7.4, 8.7.5, 8.8.3 and 16.7.3.9.4 in relation to subdivision design and the relevant Outline Development Plan (ODP). These non-compliances include developing prior to the spine road being open to the public and intersection upgrades have occurred. I consider that the proposal is broadly consistent with the ODP layout and the matters of discretion. My reasoning is as follows:

- The proposed allotments are of a sufficient size and dimension anticipated for the Industrial Heavy zone;
- The surrounding environment is zoned industrial (either Industrial Heavy or Industrial General Zone) therefore the site design is considered to be compatible with the adjoining subdivision and land use activities;
- The underlying subdivision, RMA/2022/163, has also considered these non-compliances and accepted the activity. An additional allotment does not change the previous assessment.

Overall I consider the proposal supports the development of the South West Hornby Industrial Area.

Services

A sewer connection is proposed for both allotments. Rule 8.6.8 requires a wastewater capacity certificate is provided to confirm allotments have adequate wastewater capacity. This application does not include a wastewater capacity certificate. Wastewater capacity has been assessed as above and it has been identified that the site has no sewer constraints. Conditions have been recommended to enable all allotments to be

connected to wastewater services. I consider the lack of a wastewater capacity certificate to create less than minor effects in this instance.

Conclusion

The proposed subdivision is generally anticipated within the zone, and I consider that any adverse effects on the environment can be adequately mitigated by the recommended conditions of consent. The effects of the non-compliances are less than minor and there are no affected parties.

Notification assessment [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notified or limited notification of an application is required.

Public notification

- Step 1. The application does not meet any of the criteria for mandatory notification in section 95A(2).
- Step 2. The application must not be publicly notified as Rule 8.4.1.1 a. precludes public notification for restricted discretionary subdivision consents and Rule 16.5.4.1.3 RD3 b. precludes public notification of the land use activity (section 95A(5)(a)).
- Step 3. This step is not applicable as public notification of the application is prevented by Step 2.
- Step 4. There are no special circumstances that warrant public notification (section 95A(9)).

Limited notification assessment

- Step 1. There are no affected groups or persons as outlined in section 95B(2) and (3).
- Step 2. The application does not meet any of the criteria in section 95B(6) precluding limited notification, as there are no rules precluding it and the application is not for a controlled activity land use consent.
- Step 3. As discussed above, no persons are considered to be affected under section 95E (sections 95B(7) and (8)).
- Step 4. There are no special circumstances that warrant notification to any other persons (section 95B(10)).

Conclusion on notification

There is no requirement for public or limited notification of either the subdivision or land use aspect of this application.

Other Section 104 matters

The application is:

- Consistent with the relevant objectives, policies and matters of discretion in the District Plan which essentially seek to maintain or enhance the amenities of the built environment, and ensure that the creation of new allotments does not adversely impact on physical infrastructure or the cost of its provision.
- Consistent with the relevant objectives and policies in Chapter 8 of the District Plan, as the new allotments will be appropriately designed and serviced for the anticipated purpose.
- Able to be granted consent without public notification, pursuant to Section 104(3)(d).

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health is not relevant to this application as there is no evidence to suggest that the land has been used, or is more likely than not to have been used, for an activity on the Hazardous Activities and Industries List.

For completeness, I note that the District Plan gives effect to the relevant higher order planning documents referred to in s104(1)(b). The Plan was competently prepared and appropriately reflects the higher order provisions, so they do not need to be specifically addressed in this report¹.

Section 106

s106 Consent authority may refuse subdivision consent in certain circumstances

- (1) *A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—*
 - (a) *there is a significant risk from natural hazards; or*
 - (b) *(repealed)*

¹ R J Davidson Family Trust v Marlborough District Council [2018] NZCA 316

- (c) *sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.*
- (1A) *For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—*
 - (a) *the likelihood of natural hazards occurring (whether individually or in combination); and*
 - (b) *the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and*
 - (c) *any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).*

This section of the Act is particularly relevant in relation to geotechnical concerns following the Canterbury earthquakes. The land is classified by CERA as Technical Category 1 where future land damage from liquefaction is unlikely.

The applicant has submitted a geotechnical report prepared by ENGCO Consulting Engineers which has been reviewed by Council's Subdivision Engineer Yvonne McDonald. Ms McDonald comments that the report confirms the land meets TC1, and as such no further conditions are required.

I accept the advice provided to me regarding the risk of natural hazards, and conclude that there are no grounds to refuse consent under section 106(1)(a). In terms of section 106(1)(c) I am satisfied that adequate legal and physical access is provided to each allotment.

Recommendations

LAND USE CONSENT

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C, 108 and 108AA of the Resource Management Act 1991, subject to the following condition:
 - 1. The development shall proceed in accordance with the information and plans submitted with the application.

SUBDIVISION CONSENT

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C and 106 of the Resource Management Act 1991, subject to the following conditions imposed pursuant to Sections 108, 108AA and 220 of the Resource Management Act 1991:
 - 1. **Compliance with Application Information**

The survey plan, when submitted to Council for certification, is to be substantially in accordance with the stamped approved application plan.
 - 2. **Stormwater**
 - 2.1 A stormwater lateral is to be laid to at least 600mm inside the building area of Lot 2, through easement B.
 - 2.2 This work must be installed and inspected under a building consent obtained from the Building Consenting Unit. A Code Compliance Certificate to be provided with the 224 request. <https://ccc.govt.nz/consents-and-licences/building-consents/building-consent/apply-for-a-building-consent>
 - 2.3 As the work proposed is on private property, a Building Consent Exemption (BCE) can be applied for. Where the laterals are installed under BCE, construction shall be in accordance with the CSS

and the IDS. As-built plans and a PS3 Producer Statement will be required to be provided and accepted prior to issue of the 224 certificate.

3. Telecommunications and Energy Supply

- 3.1 All lots shall have telecommunications and electrical supply laid to the net site area of each lot.
- 3.2 As-built plans and photographic evidence of the telecommunications and energy supply ducts or cables is to be supplied showing that the ducts or cables have been laid to the net area of each lot.
- 3.3 The consent holder is to provide a copy of the reticulation agreement letter from the telecommunications network operator and a letter from the electrical energy network operator, or their approved agent, to confirm capacity is available to adequately service the sites.

4. Service Easements

- 4.1 The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.
- 4.2 Easements over adjoining land or in favour of adjoining land are to be shown in a schedule on the Land Transfer Plan. A solicitor's undertaking will be required to ensure that the easements are created on deposit of the plan.

5. Lapsing of Consent

The period within which this consent may be given effect to shall be 5 years from the date on which consent was granted. The consent will be given effect to when the survey plan has been certified pursuant to Section 223 of the Resource Management Act 1991.

ADVICE NOTES FOR CONSENT HOLDERS, TO BE READ IN CONJUNCTION WITH THE DECISION

Your Rights of Objection

If you do not agree with the Council's decision on this resource consent application, the conditions, or any additional fees that have been charged, you may lodge an objection with the Council under Section 357 or 357B of the Resource Management Act 1991. You have 15 working days from the date you receive this letter within which to lodge your objection **to the decision**. Objections **to additional fees** must be received within 15 working days of the date on which you receive the invoice. Your objection must be in writing and should clearly explain the reasons for your objection.

Commencement of this consent

The commencement date for your resource consent is the date of this letter advising you of the Council's decision, unless you lodge an objection against the decision. The commencement date will then be the date on which the decision on the objection is determined.

Lapsing of this consent

This resource consent for subdivision will lapse 5 years after the date of commencement of consent (i.e. the date of this letter) unless it has been given effect to by the Council issuing a certificate pursuant to Section 223 of the Resource Management Act 1991.

Application may be made under Section 125 of the Resource Management Act 1991 to extend the duration of the resource consent, and this must be submitted and approved prior to the consent lapsing.

Lapsing of s223 Certification

The s223 certification will lapse 3 years after the date of issue, the Section 223 certificate will lapse (if that certified plan has not been deposited in accordance with Section 224 of the Resource Management Act 1991). The s223 certificate can be re-certified only if the subdivision consent has not lapsed.

Development Contributions

This proposal has been assessed for development contributions (DCs) under the provisions of the [Christchurch City Council Development Contributions Policy](#) (DCP). The proposal has been found to create additional demand on network and community infrastructure or reserves.

To help fund community facilities, the Local Government Act 2002 (LGA) allows a council to require development contributions if the effect of a development requires the council to provide new or upgraded infrastructure.

This Notice informs you of the DCs required by the Council for the development but is not a request for payment. An invoice will be issued by the Council when it requires payment of the DC's. Payment will be required before issue of a code compliance certificate for a building consent, commencement of the resource consent activity, issue of a section 224(c) certificate for a subdivision consent or authorisation of a service connection, whichever is first. An invoice can be issued earlier at your request. Council may also issue an invoice, at its discretion, if it considers the development is already utilising Council infrastructure for which DCs are being required.

Development contribution assessment summary

Development Contributions Summary		Application Ref: RMA/2022/1172								
Customer Name		Assessment								
Project Address		Whatever it Takes 2003 Limited								
Assessment Date		320 Shands Road, Lot 27								
		26/04/2022								
Activity	Catchment	Existing HUE	Proposed HUE	Net Increase to HUE Demand	Discount	Chargeable HUE	HUE Rate (incl GST)	DC Charge (incl GST)	Reduction (incl GST)	Net DC Charge (incl GST)
		A	B	C	D	E	F	G	H	I
Network Infrastructure										
Water Supply	West	1.00	2.00	1.00	0.00%	1.00	\$1,849.24	\$1,849.24	\$0.00	\$1,849.24
Wastewater Collection	West	1.00	2.00	1.00	0.00%	1.00	\$3,332.19	\$3,332.19	\$0.00	\$3,332.19
Wastewater Treatment & Disposal	Christchurch	1.00	2.00	1.00	0.00%	1.00	\$1,075.65	\$1,075.65	\$0.00	\$1,075.65
Stormwater & Flood Protection	Halswell	1.00	2.00	1.00	96.00%	0.04	\$15,489.90	\$619.60	\$0.00	\$619.60
Road Network	Growth	1.00	2.00	1.00	0.00%	1.00	\$3,863.84	\$3,863.84	\$0.00	\$3,863.84
Active Travel	Metro Zone	1.00	2.00	1.00	0.00%	1.00	\$979.46	\$979.46	\$0.00	\$979.46
Public Transport	Metro Zone	1.00	2.00	1.00	0.00%	1.00	\$553.63	\$553.63	\$0.00	\$553.63
Community Infrastructure	District Wide	1.00	2.00	1.00	0.00%	1.00	\$988.43	\$988.43	\$0.00	\$988.43
Total Network & Community Infrastructure								\$13,262.04		\$13,262.04
Reserves										
Regional Parks	District Wide	1.00	2.00	1.00	0.00%	1.00		\$116.23	\$0.00	\$116.23
Garden & Heritage Parks	District Wide	1.00	2.00	1.00	0.00%	1.00		\$161.42	\$0.00	\$161.42
Sports Parks	District Wide	1.00	2.00	1.00	0.00%	1.00		\$387.75	\$0.00	\$387.75
Neighbourhood Parks	Growth	1.00	2.00	1.00	0.00%	1.00		\$543.60	\$0.00	\$543.60
Total Reserves								\$1,209.00		\$1,209.00
							GST 15%			\$1,887.53
							Total Development Contribution			\$14,471.04

Where both a resource consent and building consent are required as part of the same development, a development contribution (DC) assessment will be undertaken for both consents. However the applicant need only pay for one assessment. As a result, the Council will only invoice in accordance with either the assessment on the resource consent or the assessment on the building consent, whichever is the lower of the two (after any corrections or reassessments undertaken in accordance with the DCP).

The DC assessment is valid for 24 months from the date the assessment is issued (usually with the consent). If the original assessment expires before payment is made, reassessment of the DCs required will be carried out at the same time the invoice is generated.

Reassessments will incorporate any increases to the development contribution requirement in line with the Producers Price Index (PPI) as described in Parts 2.9 and A.7.3 of the DCP. PPI adjustments will incorporate all years between the original application and the time the reassessment is carried out.

Reconsiderations and objections

Under section 199A of the Local Government Act 2002 you can request that the Council reconsider the required DC on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the Council incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the Council has recorded or used it when requiring a development contribution, was incomplete or contained errors.

A Request for Reconsideration form must be lodged with Council within 10 working days of receiving this DC Notice.

Under section 199C of the Local Government Act 2002 you can object to the assessed DC requirement on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the territorial authority incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the territorial authority has recorded or used it when requiring a development contribution, was incomplete or contained errors.

An Objection to DCs form must be lodged with the Council within 15 working days of receiving this DC Notice or a reconsidered assessment. A deposit of \$1,000.00 will be required to lodge an objection.

A form to request a reconsideration or lodge an objection can be found on our website. To request an invoice please contact a Development Contributions Assessor by phone on (03) 941-8999 or email developmentcontributions@ccc.govt.nz. Once an invoice has been issued payment is required within 30 days. Please quote the project number with all correspondence.

Further information regarding development contributions can be found on our website www.ccc.govt.nz or by contacting a Development Contributions Assessor on (03) 941-8999.

Payments to Council

If any payments to Council are to be made through internet banking please email the details to resourceconsentapplications@ccc.govt.nz and a tax invoice will be raised. The internet banking details are:

Bank: *Bank of New Zealand*
Account Name: *Christchurch City Council*
Account Number: *02 0800 0044765 003*

The information you need to enter to help us identify your payment will be specified at the bottom of the invoice (i.e. Particulars, Code and Reference details).

Please note that all payments will be credited to our account on the next business day. Any payment made without the details above may take some time to be lodged against the correct account.

Please email resourceconsentapplications@ccc.govt.nz to notify us when you have made payment.

Health of Land

In the event that soils are found to have visible staining, odours and/or other conditions that indicate soil contamination, then work must cease until a Suitably Qualified and Experienced Practitioner (SQEP) engaged by the consent holder has assessed the matter and advised of the appropriate remediation and/or disposal options for these soils. The consent holder shall immediately notify the Council Attention: Team Leader Environmental Health, by way of email to rcmon@ccc.govt.nz. Any measures to manage the risk from potential soil contamination shall also be communicated to the Council prior to work re-commencing.

Allocated Street Numbers

Street number allocation was not available at time of granting this consent. For any street number allocation enquiries please email streetnumbering@ccc.govt.nz

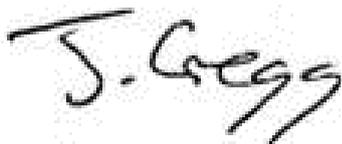
Reported and recommended by: Leashelle Miller, Planning Technician

Date: 16/05/2022

Decision

That the above recommendations be adopted for the reasons outlined in the report.

Delegated officer:



Jonathan Gregg
Team Leader Planning
16/05/2022 02:53 pm

The boundaries, dimensions & areas shown on this plan are subject to survey.



Proposed Easements			
Purpose	Shown	Serv Ten Burdened	Dom Ten Burdened
Right to convey electricity & telecommunications	A	Lot 1	Lot 2
Right to drain water	B	Lot 1	Lot 2



Proposed Subdivision of Lot 27 DP 572508		
Scale	1:1000 at A3	
Date	06/04/2022	
Client	Whatever It Takes 2003 Ltd	
Drawn	JFI	
Review	OE	
Rev.	Date	Amendment
A	6/4/22	client issue
Revision		
A		
Sheet		
100		

Report / Decision on a Resource Consent Application

(Sections 95A, 95B and 104 /104C)

Application number:	RMA/2022/2363
Applicant:	NTP Development Holdings Limited
Site address:	18 Quadrant Drive, Properties on Quadrant Drive, Mānia Road, Aruhe Road and Pākihi Road (Previously Known as 320 Shands Road and 637 Main South Road)
Legal description:	Lots 1-14 DP 572508, Lots 16-28 DP 572508 and Lot 201 DP 572508 and Lot 2 DP 572508.
Zone:	Industrial Heavy (South West Hornby)
Overlays and map notations:	Christchurch International Airport Protection Surfaces overlay, 33kV Electricity Lines, 66kV Electricity Distribution Lines, 220kV National Grid
Activity status:	Restricted Discretionary
Application:	Global Consent for Road Boundary Setback Reduction

Proposed activity

The proposal is described in detail on Section 10-11 of the application. The key aspects are:

- The applicant is proposing to apply for a global land use consent to reduce the minimum road boundary setbacks from 20m to 1.5 for internal roads and 3m for setbacks relating to Shands Road and the Main South Road.
- Two owners of the lots created by RMA/2022/163 have already obtained resource consent for a reduced setback. This proposal seeks consent for all other lots within the subdivision that do not already have a road setback intrusion in a land use resource consent.

Description of site and existing environment

The application site and surrounding environment are described in section 5-9 of the application. I adopt the applicant's description and note the following additional points:

- I consider the site description under RMA/2022/163 is still relevant for this application.

Activity status

Christchurch District Plan

The site is zoned Industrial Heavy in the Christchurch District Plan.

The proposal requires resource consent for a restricted discretionary activity under the following rules:

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
16.5.4.1.3 RD5	16.5.4.2.2 (ii)	<p>The application is proposing to reduce road boundary setbacks from 20m to the following:</p> <ul style="list-style-type: none"> - 3 metres setback from Shands Road and Main South Road - 1.5 metres setback within internal road boundaries of the underlying subdivision 	16.7.1.3	Shall not be publicly notified

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		(RMA/2022/163)		

Written approvals [Sections 95D, 95E(3)(a) and 104(3)(a)(ii)]

No written approvals have been provided with the application.

NOTIFICATION ASSESSMENT

Adverse effects on the environment and affected persons [Sections 95A, 95B, 95E(3) and 95D]

When assessing whether adverse effects on the **environment** will be, or are likely to be, more than minor, any effects on the owners and occupiers of the application site and adjacent properties must be disregarded (section 95D(a)). The assessment of **affected persons** under section 95E includes persons on adjacent properties as well as those within the wider environment.

As a restricted discretionary activity, assessment of the effects of this proposal is limited to the matters of discretion for the rules breached. The relevant matters of discretion are listed in clause 16.7.1.3.

In terms of the overall context of the road boundary setback requirement, the 20m was created during the Independent Hearing Panel's (IHP) decision, which was intended to address the rural interface along Marshs Road. I have provided a summary of my findings of the IHP decision:

- The IHP decision discussed the Marshs Road boundary setback in detail however the other roads (including future roads) was not discussed;
- It appears the intention behind the rule was to retain rural appearance and in particular to allotments which adjoin or are adjacent to rural sections. As shown in the IHP decision this was more focused on Marshes Road than Shands Road. Shands Road and the internal roading network will be established to be industrial in nature.

I consider the 20m setback was added in error for Shands Road, Main South Road and the internal roads. Notwithstanding an assessment of the reduction of road setback is required however I consider the effects to be less than minor for the following reasoning:

- There is not a change to the rural interface as setbacks along Marshs Road will remain unchanged by this application;
- No rural or residential activities are occurring within or adjacent to the application site where the road boundary intrusions are to occur;
- No effect on the setback compliance for transmission lines will occur as part of this application;
- The street scene amenity of Shands Road and internal roads are industrial in nature and it is anticipated that the application site will retain this characteristic;
- In the general Industrial Heavy Zones, the roading setbacks are 1.5m for internal roads and 3m for any activity fronting an arterial road. In the adjoining subdivision, Sir James Wattie Drive, require a setback of 6 metres for Marshs Road and sites adjoining designation of the Southern Motorway. I consider the proposal will have similar effects to the permitted activities in other Industrial Heavy zones;
- In terms of the street scene of Main South Road, while most of the area remains underdeveloped/rural in appearance, it is zoned Industrial Heavy as it connects to Waterloo Park. There are already some established industrial buildings in this area, which have been operational for a number of years. I do not consider a change in the street scene frontage to industrial and a reduced setback will create anything more than a less than minor effect given the zoning of the land and intended development outcomes.
- I consider that a one metre landscaping strip adjoining internal roads is appropriate. The landscaping shall consist predominantly of shrubs, as trees are unlikely to be established in this corridor. I consider that most shrubs, except those adjoining glazed areas of building shall reach a maturity height of 2m. The applicant has accepted this.
- I consider that a three metre landscaping strip adjoining Shands Road and Main South Road is appropriate. The landscaping shall consist predominantly of trees and shrubs. I consider that a tree should be planted every 10 metres of the road frontage. The applicant has accepted this.

Conclusion

Overall, I consider that any adverse effects on the wider environment will be **less than minor** and that there will be no affected persons.

Notification tests [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notification or limited notification of an application is required.

PUBLIC NOTIFICATION TESTS – Section 95A	
Step 1: Mandatory notification – section 95A(3)	
➤ Has the applicant requested that the application be publicly notified?	No
➤ Is public notification required under s95C (following a request for further information or commissioning of report)?	No
➤ Is the application made jointly with an application to exchange reserve land?	No
Step 2: If not required by Step 1, notification is precluded if any of these apply – section 95A(5)	
➤ Does a rule or NES preclude public notification for all aspects of the application?	Yes
➤ Is the application a controlled activity?	No
➤ Is the application a boundary activity?	Yes
Step 3: Notification required in certain circumstances if not precluded by Step 2 – section 95A(8)	
➤ Does a rule or NES require public notification?	No
➤ Will the activity have, or is it likely to have, adverse effects on the environment that are more than minor (discussed above)?	No
Step 4: Relevant to all applications that don't already require notification – section 95A(9)	
➤ Do special circumstances exist that warrant the application being publicly notified?	No

In accordance with the provisions of section 95A, the application **must not be publicly notified**.

LIMITED NOTIFICATION TESTS – Section 95B	
Step 1: Certain affected groups/persons must be notified – sections 95B(2) and (3)	
➤ Are there any affected protected customary rights groups or customary marine title groups?	No
➤ If the activity will be on, adjacent to, or might affect land subject to a statutory acknowledgement - is Te Rūnanga o Ngāi Tahu an affected person in this regard?	No
Step 2: If not required by Step 1, notification is precluded if any of the following apply – section 95B(6)	
➤ Does a rule or NES preclude limited notification for all aspects of the application?	No
➤ Is this a land use consent application for a controlled activity?	No
Step 3: Notification of other persons if not precluded by Step 2 – sections 95B(7) and (8)	
➤ Are there any affected persons under s95E, i.e. persons on whom the effects are minor or more than minor, and who have not given written approval (discussed above)?	No
Step 4: Relevant to all applications – section 95B(10)	
➤ Do special circumstances exist that warrant notification to any other persons not identified above?	No

In accordance with the provisions of section 95B, the application **must not be limited notified**.

Notification recommendation

That, for the reasons outlined above, the application be processed on a **non-notified** basis pursuant to sections 95A and 95B of the Resource Management Act 1991.

Notification decision

That the above recommendation be accepted for the reasons outlined in the report.

Delegated officer:



Sean Ward
Team Leader Planning
06/09/2022

SECTION 104 ASSESSMENT

Actual and potential effects on the environment [Section 104(1)(a)]

The adverse effects on the environment are assessed in the preceding section 95 discussion, and that assessment is equally applicable here.

Overall, I consider that the effects on the environment are able to be mitigated through compliance with recommended conditions such that they will be **less than minor** and acceptable.

Relevant objectives, policies, rules and other provisions of the Plan [Section 104(1)(b)(vi)]

Regard must be had to the relevant objectives and policies in the District Plan. I consider the proposal is consistent with the objectives and policies of Chapter 16 for the following reasons:

- Objective 16.2.1.1 – For the reasons outlined below;
- Policy 16.2.1.3 - The reduced setback still meets the description of the Industrial Heavy Zone. The application is consistent due to the location of the site which is not adjoining sensitivities activities or residential/rural zoning and provides for industrial or other compatible activities;
- Policy 16.2.3 - The proposed global consent acknowledges that the anticipated outcomes of the zoning is to be achieved and is noted that amenity may not be the same as currently provided for in these areas however will remain industrial in nature;
- Policy 16.2.3.1 – The use of landscaping as discussed above managed any effects created by the reduced road boundary setback and recognises the function need of the industrial zoning.

Relevant provisions of a National Environmental Standard, National Policy Statement, Regional Plan, Regional Policy Statement or Coastal Policy Statement [Section 104(1)(b)]

The District Plan gives effect to the relevant higher order documents referred to in s104(1)(b), including the Regional Policy Statement and Regional Plans. As such, there is no need to specifically address them in this report.

Part 2 of the Resource Management Act [Section 104(1)]

Taking guidance from the most recent case law¹, the District Plan is considered to be the mechanism by which the purpose and principles of the Act are given effect to in the Christchurch District. It was competently

¹ *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316

prepared through an independent hearing and decision-making process in a manner that appropriately reflects the provisions of sections 5-8 of the Act.

Accordingly no further assessment against Part 2 is considered necessary.

Section 104(3)(d) notification consideration

Section 104(3)(d) states that consent must not be granted if an application should have been notified and was not. No matters have arisen in the assessment of this application which would indicate that the application ought to have been notified.

Section 104 Recommendation

That, for the above reasons, the application **be granted** pursuant to Sections 104, 104C, 108 and 108AA of the Resource Management Act 1991, subject to the following conditions:

1. The development shall proceed in accordance with the information submitted with the application.
2. Any building shall comply with all applicable operative District Plan rules for the zone of the site in the Christchurch District Plan or equivalent Council Plan with the exception of road boundary setbacks (currently Rule 16.5.4.2.2 (ii)). The following shall instead apply:
 - a. Allotments which are directly adjoining Mānia Road, Aruhe Road, Quadrant Drive & Pākhi Road – 1.5 metre setback
 - b. Allotments which are directly adjoining Main South Road (SH1) and Shands Road – 3 metre setback
3. In terms of allotments adjoining Mānia Road, Aruhe Road, Quadrant Drive & Pākhi Road, a 1m landscaping strip shall be provided and consist predominantly of shrubs. Shrubs not directly adjacent to glazed areas of buildings shall have a maturity height of 2 metres.
4. In terms of allotments adjoining Main South Road (SH1) and Shands Road, a 3m landscaping strip shall be provided and consist predominantly of trees and shrubs. One tree shall be provided every 10m of the road frontage. The trees shall be capable of achieving over 4 metres in height at maturity.
5. The proposed landscaping shall be established on site within the first planting season (extending from 1 April to 30 September) following the passed building inspection on the allotment it applies to.
6. All landscaping required for this consent shall be maintained. Any dead, diseased, or damaged landscaping shall be replaced by the consent holder within the following planting season (extending from 1 April to 30 September) with trees/shrubs of similar species to the existing landscaping.

Advice Notes:

- The Council will require payment of its administrative charges in relation to **monitoring of conditions**, as authorised by the provisions of section 36 of the Resource Management Act 1991. The current monitoring charges are:
 - (i) A monitoring programme administration fee of \$102.00 to cover the cost of setting up the monitoring programme; and
 - (ii) A monitoring fee of \$175.50 for the first monitoring inspection to ensure compliance with the conditions of this consent; and
 - (iii) Time charged at an hourly rate if more than one inspection, certification of conditions, or additional monitoring activities (including those relating to non-compliance with conditions), are required.

The monitoring programme administration fee and inspection fees will be charged to the applicant with the consent processing costs. Any additional monitoring time will be invoiced to the consent holder when the monitoring is carried out, at the hourly rate specified in the applicable Annual Plan Schedule of Fees and Charges.

- This resource consent has been processed under the Resource Management Act 1991 and relates to **planning matters only**. You will also need to comply with the requirements of the Building Act 2004 and

any other legislative requirements (including but not limited to Environment Canterbury Regional Plans, health licence, liquor licence, archaeological authority, certificate of title restrictions such as covenants, consent notices, encumbrances, right of way or easement restrictions, landowner approval where required).

- For more information about the **building consent process** please contact our Duty Building Consent Officer (phone 941 8999) or go to our website <https://ccc.govt.nz/consents-and-licences/>

Development Contributions

No development contributions are payable on this consent.

Reported and recommended by: Rachel Cottam, Planner

Date: 26/08/2022

Section 104 Decision

That the above recommendation be accepted for the reasons outlined in the report.

- I have viewed the application and plans.
- I have read the report and accept the conclusions and recommendation.

Delegated officer:



Sean Ward
Team Leader Planning
06/09/2022 04:10 pm

08 April 2024

Our reference: 530205

Attention: Pioneer Energy Limited

Site Validation Summary Letter – Lot 37-39 Aruhur Road, MANIA Subdivision, Hornby

1. Introduction

Eliot Sinclair was engaged by Pioneer Energy to provide a letter to summarise our Site Validation reporting¹ within the MANIA subdivision (i.e. 320 Shands Road) to assess the risk of soil contamination for the proposed development within Lot 37-39 Aruhue Road, Hornby ('the site') in accordance with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, Regulations 2011 (NESCS)².

2. Proposed Development

We understand the proposed development within the site will comprise of industrial buildings with processing/storage containers and tanks (i.e. industrial land use).

3. Site Validation Report 2022 – Eliot Sinclair and Partners

Asbestos Fines/Fibrous Asbestos (AF/FA) concentrations were present adjacent to and downstream of the former bubble up valves within Lot 37-39 Aruhue Road, refer to Figure 1. The depth of asbestos-contamination was typically limited to the top 150mm of the soil profile that generally comprised wash material described as 'detritus' and topsoil.

Each panel comprises of 'Sections' that are separated by mounds. The mounds are typically around 0.3m above original ground level, and around 1-2m wide.

Eliot Sinclair has undertaken Site Validation reporting¹ in May 2022 within the MANIA subdivision in general accordance with the Contaminated Land Management Guidelines (CLMG) No.1³ and No.5⁴, the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, Regulations 2011 (NESCS) and BRANZ (2017) '*New Zealand Guidelines for Assessing and Managing Asbestos in Soil*'.

¹ Site Validation Report at 320 Shands Road, Hornby prepared for Ngai Tahu Property Ltd dated 6 May 2022 reference 442038.

² Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 administered by the Ministry for the Environment

³ Ministry for the Environment (MfE) Contaminated Land Management Guidelines No. 1. Reporting on Contaminated Sites in New Zealand. (Revised 2021).

⁴ Ministry for the Environment (MfE) Contaminated Land Management Guidelines No. 5. Site Investigation and analysis of soils. (Revised 2021).

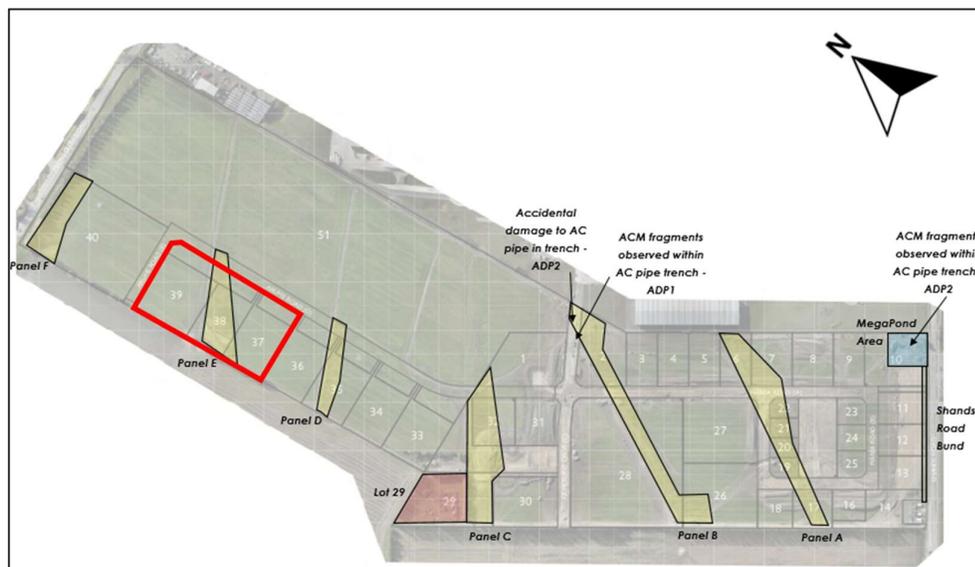


Figure 1. Annotated site plan of 320 Shands Road showing the remediation areas referred to in the Site Validation Report¹. Aerial drone imagery captured on 29 July 2021. The site is outlined in red.

3.1. Conceptual Site Model

A Conceptual Site Model (CSM) is based on the environmental setting of the site and assesses contaminant distributions, release mechanisms, exposure pathways, migration routes and potential receptors.

Following the remediation works and the validation undertaken across the site, the CSM was updated as outlined in Table 1.

Table 1. Post- remediation Conceptual Site Model for Lot 37-39 Aruhue Road, Hornby

Contaminant Source (s)	Contaminants of Concern	Transport Mechanism	Receptor	Acceptable Risk?
Former bubble up valves (Panels)	ACM and asbestos fines within the topsoil	Inhalation of fugitive dust	Future site commercial users Surrounding Environment Workers during earthworks	Yes. Validation samples collected within the area of concern recorded concentrations below the NESCS and BRANZ Commercial/Industrial land use criteria.
HAIL I (Accidental Release)				

4. Conclusion

Validation soil samples collected within the remediated areas were detected below the applicable standard in Regulation 7 of the NESCS, BRANZ and ANZECC guidelines and is therefore deemed suitable for the intended Commercial/Industrial land use.

Consequently, the objectives of the Remediation Action Plan (RAP) were met, and the site can be considered as validated for the intended land use (commercial/industrial). No further remediation is required.

However, should any soil disturbance work unveil or encounter unusual material, including (but not limited to) uncontrolled fill, stained soil, waste or construction debris, the protocol outlined in Section 6 of this Memo must be applied.

5. Soil Disposal

Please provide our Site Validation Report to the landfill facility to confirm soil disposal compliance.

6. Accidental Discovery Protocol

It is recommended that if any unusual or contaminated materials are encountered during any future site works within the site, that the requirements of the Accidental Discovery Protocol provided are followed.

If any of the following materials are encountered during any future earthworks, such as:

- Stained or odorous soil (e.g. black, green, grey; or smells of rotting organic material, petroleum hydrocarbons or solvents)
- Slag, ash, charcoal
- Rubbish comprising putrescible waste, or hardfill, or treated timber, or agrichemicals, etc
- Potential asbestos containing-material (for example fragments from cement fibre sheets, or loose fibres from insulation, etc.)

Then we recommend:

- Excavation and earthworks cease, the site secured to stop people entering the area where potential contamination was encountered, and then:
- Contact Eliot Sinclair (03) 379 4014 to inspect the area, assess the material determine if it is contaminated or hazardous, and then determine a practical course of action.

7. Disclaimer

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as a Site Validation Summary Letter.

The report is based on Eliot Sinclair's Site Validation reporting for MANIA (i.e. 320 Shands Road) Subdivision.

Where data supplied by Pioneer Energy or other external sources, including previous site investigation reports, have been relied upon, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Eliot Sinclair for incomplete or inaccurate data supplied by other parties.

The comments made in this Site Validation Summary Letter are based on a limited number of soil samples. It is possible these may not provide a complete or accurate assessment of the entire site. As a result, Eliot Sinclair provides this information on the basis that it does not guarantee that the information is complete or without error and accepts no liability for any inaccuracy in, or omission from, this information.

Whilst every care and reasonable effort has been taken during our investigation and interpretation of the subsurface conditions to ensure that the conclusions drawn, and the opinions and recommendations expressed are correct at the time of reporting, Eliot Sinclair has not performed an assessment of all possible conditions or circumstances that may exist at the site. The activities described on the HAIL may change in the future as knowledge about potentially hazardous activities develops over time.

It is possible there may be unidentified subsoil conditions that are not obvious from the information obtained by our investigations and site inspection, and that differ from the conclusions of this report. Should unusual geotechnical conditions be encountered during future earthworks such as historical uncontrolled fill materials, then Eliot Sinclair should be advised. They can review any new information and to advise if the recommendations of this report are still valid.

Variations in conditions may occur between investigatory locations and there may be conditions such as uncontrolled fill that were not detected by the scope of the investigation that was carried out or have been covered over or obscured over time. Eliot Sinclair does not provide any warranty, either express or implied, that all conditions will conform exactly to the assessments contained in this report.

The exposure of conditions that vary from those described in this report, or any future update of the NESCS or CLMG 1 and CLMG 2 may require a review of our recommendations. Eliot Sinclair should be contacted to confirm the validity of this report should any of these occur.

This report has been prepared for the benefit of Pioneer Energy for the purposes as stated above. No liability is accepted by Eliot Sinclair or any of their employees with respect to the use of this report, in whole or in part, for any other purpose or by any other party.

This report does not relieve contractors of their responsibilities under the Health and Safety at Work Act 2015. Site conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes, at their own expense.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Dumont P', is enclosed in a light grey rectangular box.

Philippe Dumont

Environmental Scientist

BAgSc(Hons) MSc CEnvP SQEP

Stakeholder Engagement Summary

Group/organisation

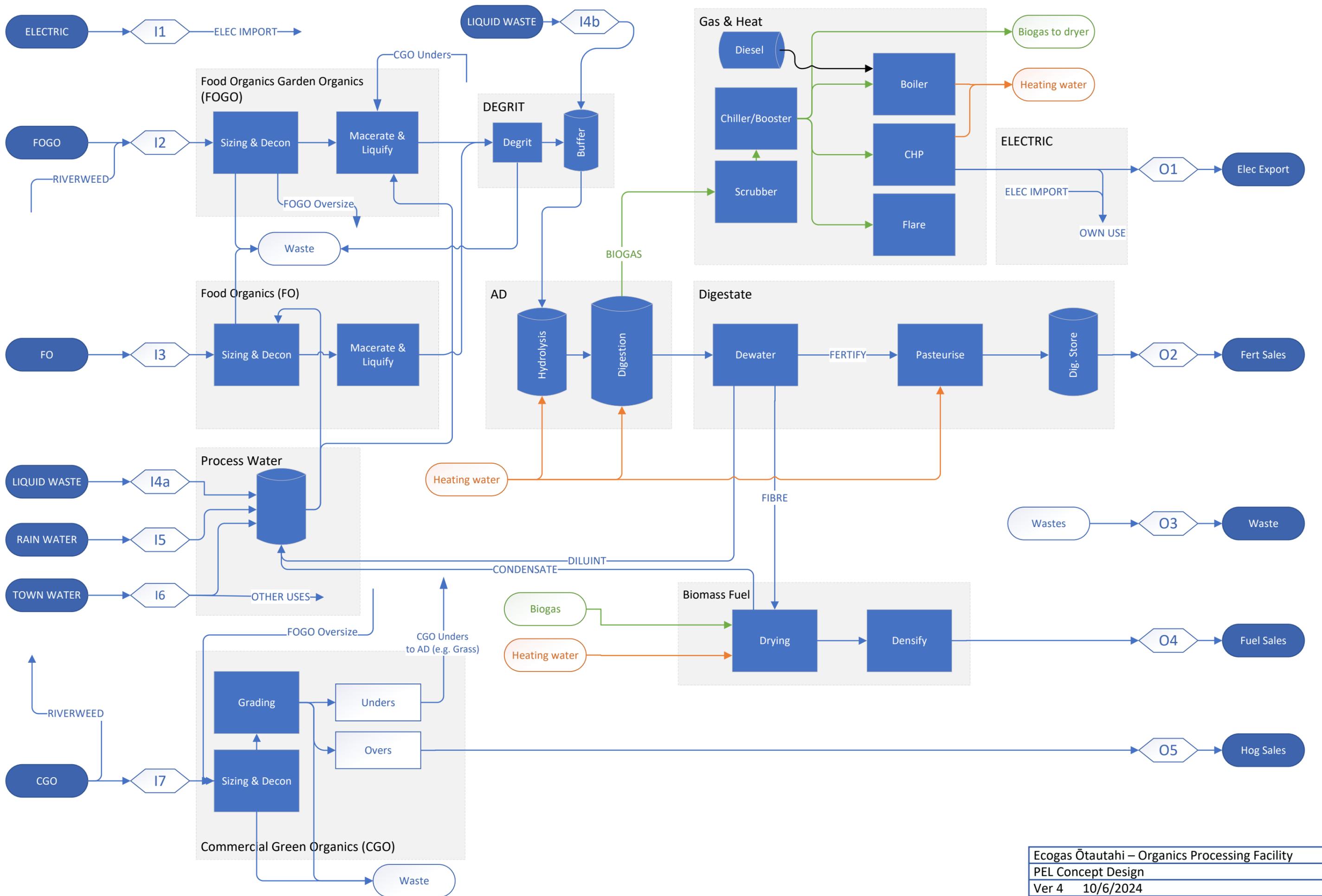
<p>Ngai Tahu Investments Ngai Tahu Farming</p>	<ul style="list-style-type: none"> • 2 June 2023 - Meeting held with Ngai Tahu Investments – Ecogas plans for Otautahi development were introduced. Alignment of outcomes for the circular food economy identified. David Tikao to facilitate introductions to mana whenua and Ngai Tahu Farming. • 4 July 2023 - Meeting held with Ngai Tahu Investments – update on development and discussion of opportunities for collaboration with potential areas identified. Agreement to continue discussions. • 9 August 2023 - Site visit held with Ngai Tahu Farming –to understand the regenerative farming project, discuss options for Fertify and outlined what is important to them in selecting fertiliser. Transport costs identified as a barrier for Fertify.
<p>Iwi Whitiora</p>	<ul style="list-style-type: none"> • 1 February 2024 - Meeting held with Whitiora. Introduce Ecogas and proposal, understand role of Whitiora and what is important to mana whenua. Opportunities for social procurement were discussed. Whitiora have a particular interest in educational site tours, the potential for joint projects in food resilience and community gardens were also discussed. • 2 June 2024 - Follow up Meeting held and site plans shown with no concerns raised. Whitiora were most interested in opportunities to show young people potential employment opportunities in the area. They are also interested in the Ecogas Rangitahi programme.
<p>Local Authority</p>	<ul style="list-style-type: none"> • 8 December 2023 - Presentation given to Councillors, Councils Executive Leadership Team, Community Board members and Resident’s association representatives to introduce Ecogas, discuss the proposal and how Ecogas would work with the community. • 8 December 2023 - Further discussion and site visit to Aruhe Road site, with Councillor for Hornby Ward - Mark Peters, Alec Mc Neill (CCC) and David McArdle (CCC). • 1 February 2024 - Presentation given to introduce Ecogas and the proposal to Waipuna, Halswell, Hornby and Riccarton Community Board members. • 19 February 2024 - Site visit to Reporoa and Papakura plant for Councillors and community representatives. To provide a good understanding of Anaerobic Digestion, demonstrate how the facilities are enclosed and odour is managed. • 5 March 2024 - Presentation and meeting with local authority officers – various Territorial Authorities in Canterbury Region including waste management officers from Christchurch City Council, Selwyn DC, Waimakariri DC, Ashburton DC and Hurunui DC. Introduce Ecogas and describe the proposed solution.

Barker & Associates

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Kerikeri | Whangārei | Warkworth | Auckland | Tauranga | Hamilton | Cambridge | Napier | Wellington | Christchurch | Wānaka | Queenstown

<p>Community</p>	<ul style="list-style-type: none"> • 28 January 2024 - Presentation to Greater Hornby residents and other community representatives at the Hornby Club to introduce Ecogas and the proposal and understand community concerns. • 19 February 2024 - Site visit to Reporoa and Papakura plant for community representatives. • 20 March 2024 - Discussion with community representatives around concerns and input into traffic management. • 4 April 2024 - Presentation to the Prebbleton Resident Association to introduce Ecogas and the proposed solution. Understand concerns and respond to questions.
<p>Adjoining Properties</p>	
<p>Foodstuffs South Island</p>	<ul style="list-style-type: none"> • 31 May 2024 - Foodstuffs South Island meeting held to introduce Ecogas and the AD facilities, share site plans and understand concerns. Foodstuffs identified areas for further discussion such as air emissions, pest control, emergency response plans and traffic management. • 25 June 2024 – Follow up meeting for more detailed discussion on topics of interest to Foodstuffs.
<p>Ngai Tahu Property</p>	<ul style="list-style-type: none"> • 1 February 2024 - Meeting held to discuss developer requirements and introduce the Ecogas proposal. Discussion around landscape and quality of the development. Benefits of Ecogas proposal was discussed. • 1 June 2024 - Ngai Tahu Property follow up meeting held to provide an update and share site plans.
<p>Calder Stewart</p>	<ul style="list-style-type: none"> • 30 May 2024 - Meeting held with Calder Stewart to introduce Ecogas and the AD facilities and share site plans.



Ecogas Ōtautahi – Organics Processing Facility
PEL Concept Design
Ver 4 10/6/2024
PROCESS BRIEF – SITE PFD



**Ecogas, Christchurch
Organic Processing Facility
Transport Assessment**

July 2024

flow

TRANSPORTATION SPECIALISTS

Project: Ecogas, Christchurch
Title: Transport Assessment
Document Reference: P:\ECOX\001 Ecogas Christchurch\4.0 Reporting\14 june final\R1B240613 Ecogas TA - FINAL.docx
Prepared by: Mikaire Paul and Elisa Tayler
Project Manager: Shaun Hardcastle
Reviewed by: Shaun Hardcastle

Revisions:

Date	Status	Reference	Approved by	Initials
17 May 2024	Draft in progress	R1B240515		
24 May 2024	Draft	R1B240524	SDH	SDH
14 June 2024	Revised Draft	R1B240614	SDH	SDH
5 July 2024	Final	R1B2400705	SDH	SDH

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EXECUTIVE SUMMARY

Flow Transportation Specialists Ltd (Flow) has been commissioned by Pioneer Energy on behalf of Ecogas Limited Partnership (the Applicant) to identify and assess the transport planning and traffic engineering matters relating to the proposed Ecogas Organic Processing Facility at the address of 17-21 Aruhe Road in Hornby, Christchurch (the Site).

The proposed development includes developing the currently undeveloped land into an organics processing facility with three (one is exit only) vehicle accesses on Aruhe Road (the Proposal).

The Proposal is required to be assessed as a Restricted Discretionary Activity due to a spine road identified in the Outline Development Plan (ODP) which has not been fully constructed. The Proposal is also classified as a high trip generator under Rule 7.4.3.10 High trip generators. We have also considered the 'Report / Decision on a Non-notified subdivision consent application RMA/2022/163' where the spine road 'C' among many other matters are considered, the finding was that CCC have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent. Considering all of the above, we propose and have prepared this Basic Integrated Transport Assessment (ITA) under Rule 7.4.2.3. (RD1).

The number of bicycle parks required is 27 based on the GFA; this proposal provides 11 in total a shortfall of 16. If demand requires an increase provision of cycling parking, there is room to accommodate more cycle parks, however at this time, we are confident that the provided 11 will suffice.

We have assessed the Proposal against all relevant activities and transport standards set out in Chapter 7 of the District Plan, refer to Appendix B, as well as the Area-specific rules for this Industrial Heavy Zone (South West Hornby) contained in Chapter 16 of the District Plan.

We conclude that all practical design matters have been addressed with early transport engagement around safety, swept path analysis, parking, visibility, cycling and pedestrian protection.

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- APPENDIX B CHAPTER 7 ASSESSMENT
- APPENDIX C VEHICLE TRACKING PLANS

1 INTRODUCTION TO THIS REPORT

Flow Transportation Specialists Ltd (Flow) has been commissioned by Pioneer Energy on behalf of Ecogas Limited Partnership (the Applicant) to identify and assess the transport planning and traffic engineering matters relating to the proposed Ecogas Organic Processing Facility at the address of 17-21 Aruhe Road in Hornby, Christchurch (the Site).

The proposed redevelopment includes developing the currently undeveloped land into an organics processing facility with three (one is exit only) vehicle accesses on Aruhe Road (the Proposal).

The Proposal is required to be assessed as a Restricted Discretionary Activity (RDA) due to a spine road identified in the Outline Development Plan (ODP) which has not been fully constructed, Ref "C road". The Proposal is also classified as a high trip generator under Rule 7.4.3.10 High trip generators. We have also considered the 'Report / Decision on a Non-notified subdivision consent application RMA/2022/163' where the spine road 'C' among many other matters are considered, the finding was that CCC have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent. In consideration of the above, we propose and have prepared this Basic Integrated Transport Assessment (ITA) under Rule 7.4.2.3 (RD1).

This ITA addresses the transport planning and traffic engineering matters associated with the proposed development, including

- ◆ a description of the Proposal and the transport elements
- ◆ a description of the surrounding transport environment as it relates to the Site, including site location, surrounding land use activities, existing vehicle access provisions, the accessibility of the Site with regard to various transport modes, and an assessment of the historic crash record in the vicinity of the Site
- ◆ an assessment of the Proposal against the relevant transport standards and provisions contained in the District Plan
- ◆ an assessment of the vehicle access arrangements
- ◆ an assessment of the design and adequacy of the parking and loading areas to support the Proposal
- ◆ a traffic assessment, including the amount of vehicle trips the Proposal is likely to generate during peak hours, and an assessment of the likely effect this traffic may have on the surrounding road network during the peak commuter hours
- ◆ a safety assessment of the surrounding road network considering the analysis of the historic crash records, and the effect the traffic expected to be generated by the Proposal may have on the safety of the surrounding network.

These and other matters are addressed in the following sections of this report.

2 THE PROPOSED DEVELOPMENT

Pioneer Energy on behalf of Ecogas Limited Partnership (the Applicant) is proposing to develop 17-21 Aruhe Road in Hornby (the Site) into an organics processing facility (the Proposal).

The Site plan of the Proposal is shown in Figure 1 and includes the following key transport planning and engineering elements

- ◆ Three vehicle crossings (1 is exit only); one existing on the eastern side and two proposed on the northern side. This is to facilitate a clockwise circulation through the Site for the majority of vehicles that are not visitors or requiring to be weighed exiting.
 - The existing vehicle crossing on the eastern side will serve as two-way access; entry for all vehicles and exit for vehicles that may need to use the weigh bridge before exiting, note, not all vehicles are required to be weighed and could exit via the north exit only.
 - The vehicle crossing on the northern side is exit only
 - The vehicle crossing on the north westernmost side is two-way for the visitor car parking.
- ◆ 10 on-site parking space for visitors and 10 for staff and contractors
 - Access to the visitor parking is from the north westernmost vehicle crossing that is separated from the rest of the Site. Bicycle parking is also located and accessed here.
 - Staff and contractor parking is situated along the western boundary of the Site. They will enter from the eastern vehicle crossing. and exit to either the north or east
- ◆ 11 cycle parks have been provided for staff and visitors attached closest to the amenities from the north and at the rear of the visitor car park area.
- ◆ Loading bay for delivery vehicles and 1 bus bays. Similarly to staff parking access; they will enter from the eastern vehicle crossing and exit to either the north or east.
- ◆ Access points to the main processing building where trucks enter and exit the building to unload and in some cases load with space for trucks to enter and exit onto Aruhe Road in a forward manoeuvre.
- ◆ The applicant has provided anticipated vehicle movements per day and is broken down by vehicle class in Table 1 later in this document.

3 THE EXISTING ENVIRONMENT

3.1 Site location and zoning

The Site is located on Aruhe Road in south Hornby and zoned within the Industrial Heavy Zone according to the Christchurch District Plan (the District Plan). Its location is shown in Figure 2 and identified on the relevant Planning Map in Figure 3.

Figure 2: Site location (boundary indicative)¹



Figure 3: District Planning Map showing the Site (approximate) and its zoning



¹ Adapted from Canterbury Maps Viewer, available online at <https://mapviewer.canterburymaps.govt.nz/>

Aruhe Road and some surrounding roads were recently constructed, with parts still under construction, so are not shown on all maps.

Of note, Shands Road and Halswell Junction Road are classified as Major Arterial roads, while Quadrant Drive and Establishment Drive are classified as Collector roads in the District Plan. We expect that Aruhe Road is classified as a local road given its current connectivity.

The surrounding area is predominantly industrial with the southern end of Quadrant Drive, including Aruhe Road, being largely undeveloped land.

3.2 The surrounding roads

Figure 4 shows the location of the Site in context of the surrounding road network. The following are descriptions of the key roads to the Site.

Figure 4: The Site in context of the surrounding road network (Source: Christchurch City Council Geomaps)



Aruhe Road

Aruhe Road is a recently constructed road with mainly vacant lots. It is currently a cul-de-sac road of some 900 m long with a posted speed limit of 50 km/h. The southern end intersects with Quadrant Drive by a give-way control. On-street parking is permitted on both sides of the road. Figure 5 shows the road frontage outside of the Site, the Site is to the left. There are footpaths on both sides of the road. No traffic volume data for Aruhe Road is available.

Figure 5: Aruhe Road looking north (Site is to the left beyond the pylon)



Quadrant Drive

Quadrant Drive is classified as a Collector road in the District Plan; at its northern end it continues onto Connaught Drive and intersects with Halswell Junction Road by a 'Stop' control. Its southern end forms a roundabout with Bruce Stewart Drive/Revolution Drive (refer to Figure 6 which was taken in February 2024). Council have informed us that this road is now open to public and connects south through to Bruce Stewart Drive.

Figure 6: Quadrant Drive looking south onto its future connection to Bruce Stewart Drive/Revolution Drive (taken February 2024). The road is now open.



Figure 6 shows Quadrant Drive, the section south of Aruhe Road intersection. On-street parking is permitted on both sides of the road where not in proximity to an intersection, and there are footpaths on both sides of the road.

According to the Waka Kotahi One Network Road Classification² map, the Annual Average Daily Traffic (AADT) volume of Quadrant Drive is 1,300 vehicles per day (vpd) with 19% heavy vehicles.

² ONRC map <https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0>

Figure 7: Quadrant Drive south of Aruhe Road intersection, looking north east



Establishment Drive

Establishment Drive is classified as a Collector road in the District Plan. Its western end intersects Quadrant Drive with a give-way control and its eastern end is signalised at Shands Road. It has a posted speed limit of 50 km/h with on-street parking and footpaths on both sides of the road. According to the Waka Kotahi ONRC it carries less than 1,000 vpd with 18% heavy vehicles.

Halswell Junction Road

Halswell Junction Road is classified as a Major Arterial road and it provides the main connection to State Highway 1 (SH1) which is about 2 km from the Site. It has a posted speed limit of 70 km/h with one lane in each direction separated by a flush median. According to the Waka Kotahi ONRC it carries 9,000 vpd with 14% heavy vehicles.

There is a shared path on the eastern side of the road and no footpaths on the other side of the road.

4 THE CHRISTCHURCH DISTRICT PLAN

Our assessment of the proposal against all relevant activities and transport standards set out in the Christchurch District Plan, is in the presented as follows;

- ◆ Section 4.1 Calculation of the Gross Floor Area (GFA)
- ◆ Section 4.2 An assessment of the High Traffic Generation rule

- ◆ Section 4.3 Area-specific rules for this Industrial HeavyZone (South West Hornby) contained in Chapter 16 of the District Plan.
- ◆ Section 4.4 confirming our proposed pathway for the proposed site

4.1 Calculation of the GFA

What is central to this assessment is that as a proposed Organic Processing Facility, there is considerable storage and holding areas in the buildings. Buildings are defined as follows in the Christchurch District Plan as;

Building definition

Means as the context requires:

- a. any structure or part of a structure whether permanent, moveable or immovable; and/or
- b. any erection, reconstruction, placement, alteration or demolition of any structure or part of any structure in, on, under or over the land;
- c. any vehicle, trailer, tent, marquee, shipping container, caravan or boat, whether fixed or moveable, used onsite as a residential unit or place of business or storage;

There are some exclusions, none of which apply to this application other than buildings under 1.8 metres.

As per the applicants drawing "23-111 2024 05 15 Area Plan.pdf" presented in Appendix A, the total building GFA is 9,279 m². Of that area 3,956 m² of GFA is accessible to humans. Leaving 5,323 m² of building structures not accessible by humans.

For this assessment we will use the full GFA of 9,279 m²

4.2 High Traffic Generation Rule

We have assessed the Proposal according to Rule 7.4.4.18 High trip generators

- ◆ The Proposal is as an industrial activity 9,279 m² gross floor area (GFA) which exceeds the 5,000m² GFA in section 7.4.3.10 table for industrial activities
- ◆ In Table 7.4.4.18.1 the threshold for a full ITA for industrial activity is 10,000 m² of GFA which the Proposal does not exceed.
- ◆ The access to the Site is from a local road
- ◆ The activity is permitted in the Industrial Heavy Zone.

A Basic ITA is suggested based on the GFA calculation and the application of the High Traffic generator Rule, 7.4.2.3 (RD1) . There is further consideration however given the area specific rules for the proposed site.

4.3 Area Specific Rules in Chapter 16

In Chapter 16 Industrial Heavy Zone (South West Hornby) of the District Plan, Rule 16.5.4.1.3 RD3 applies to the proposed site which references to an Outline Development Plan (ODP). The activity is described as below, which is partly satisfied:

a. Any development (excluding rural activities and irrigation of water from industrial processes) within the area shown as 'rural wastewater irrigation area' on the outline development plan in Appendix 16.8.8 until:

- i. The full southern spine road between Main South Road and Shands Road (marked as 'C' on the outline development plan in Appendix 16.8.8) has been constructed and is open to traffic; and*
- ii. Capacity upgrades have commenced at the following intersections:*
 - A. Intersection of the southern spine road and Shands Road (marked as 'A' on outline development plan in Appendix 16.8.8)*
 - B. Intersection of the northern spine road and Shands Road (marked as 'B' on outline development plan in Appendix 16.8.8).*

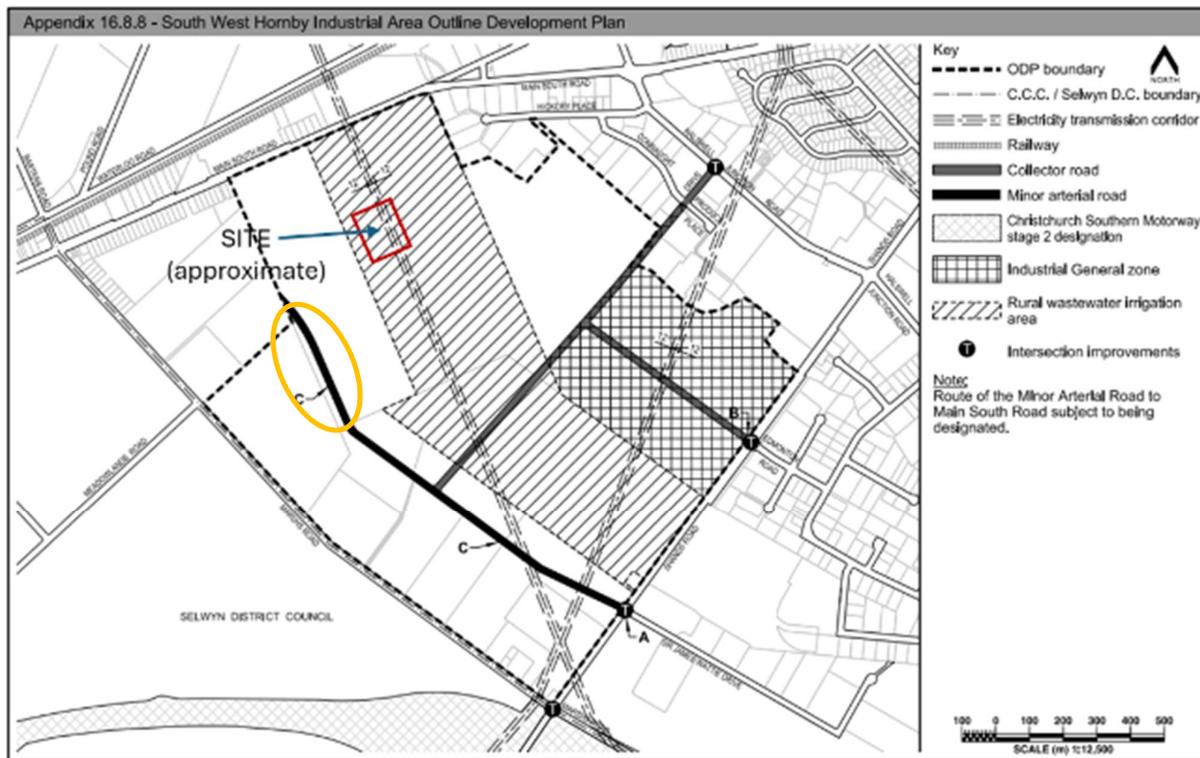
a. Any application arising from this rule shall not be publicly notified.

b. Information requirement for RD3: A full Integrated Transport Assessment shall be completed and included in the application.

The above is partly satisfied:

- ◆ The Site is within the 'rural wastewater irrigation area' in the Outline Development Plan (ODP), refer to Figure 8. Spine road 'C road' in the ODP has been partially constructed. The southern end (named as Bruce Stewart Drive) is open but the northern end circled in Figure 8 is not yet constructed.
- ◆ Signalisation of intersection 'A' (Bruce Stewart Drive/Shands Road) has been completed (note that this does not form a fourth leg at the intersection with Sir James Wattie Drive, as depicted in the ODP, but is located about 150 m south of it, as shown previously in Figure 4) and the signalisation of intersection 'B', being Establishment Drive/Shands Road/Edmonton Road is now operational.

Figure 8: Site location in context of the ODP



The non completion of the spine Road “C” as set out in the ODP renders input from The Council’s discretion as set out in section 16.5.4.1.3 (RD3). Further there is a requirement in part C that information requirement for RD3: A full integrated Transport Assessment shall be completed and included in the application.

The recommendation then is for a full integrated Transport Assessment based on the non-completion of Road C as shown in Figure 8. In our opinion this has no material effect on the operation of proposed site and if and when it is connected will only improve vehicle accessibility and add further route choice to the system.

Further, we have also considered the ‘Report / Decision on a Non-notified subdivision consent application RMA/2022/163’ where the spine road ‘C’ among many other matters are considered, the finding was that CCC have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent.

We propose that a Basic ITA is reasonable given the status of RD3 in section 16.5.4.1.3 and the completion of all reasonable transport network infrastructure.

4.4 Proposed Pathway

The following has been established.

- A Basic ITA is suggested based on the GFA calculation and the application of the High Traffic generator Rule, 7.4.2.3 (RD1)
- A full integrated transport assessment from chapter 16 is suggested in RD3 based on the non-completion of spine road “C”, we propose that a Basic ITA is adequate given that Council’s discretion could be applied given the nature of the non-completion and proposed connectivity.
- the ‘Report / Decision on a Non-notified subdivision consent application RMA/2022/163’ the finding was that CCC have concluded that the internal network of the proposal is appropriate and the effects on the transport network will be mitigated via conditions of the consent.

As such a Basic ITA is proposed and has been prepared for the Proposal with includes the following assessment matters as indicated in advice note Table 7.4.4.18 – Activities that are not permitted in the Zones Activity Status Table – Basic ITA and rule 7.4.2.3 (RD1).

1. Access and manoeuvring (safety and efficiency) – refer to Section 6.1 and 8
2. Design and layout – refer to Section 6.1 and 8
3. Heavy vehicles - refer to Section 7
4. Accessibility of the location – refer to Section 5

5 SAFETY AND ACCESSIBILITY OF THE SITE

The following subsections describe the Site in terms of

- ◆ Public transport accessibility
- ◆ Walking and cycling accessibility
- ◆ Private vehicle accessibility
- ◆ Safety of the adjacent transport network.

In summary, we consider that the Site is mainly accessible by private vehicles with very limited current access to public bus routes, and there is good cycling access which will improve because of the new cycling infrastructure included in the new roads. There were no crash trends identified for the adjacent transport network.

5.1 Public transport accessibility

The nearest bus stop is a 14-20-minute walking distance from the Site, on Halswell Junction Road in Islington. We consider that the Site is not easily accessible by public transport given the walking distance to the nearest bus stops. As the area develops future consideration may be given to re-routed or new public transport access, however currently it is poorly serviced as shown in walk time diagrams in Figure 10 and Figure 11.

Figure 9: Bus routes and stops near the Site (sourced from Metro Christchurch map)



Figure 10: Walk time Option 1 : Bus Stop at Foremans Road (to proposed site) (Distance is 1.46 Km = 20 mins)

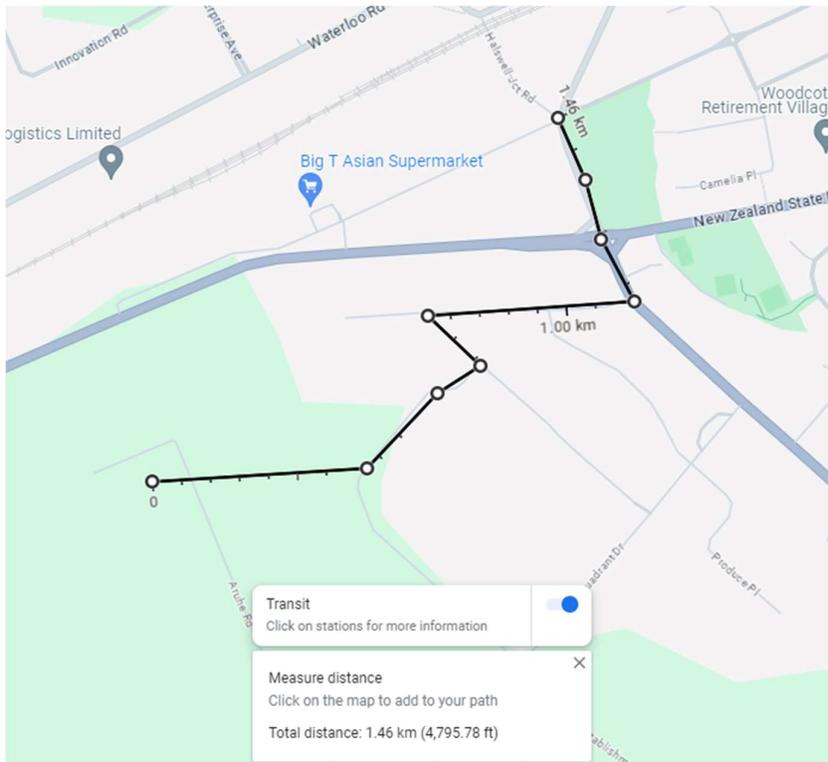
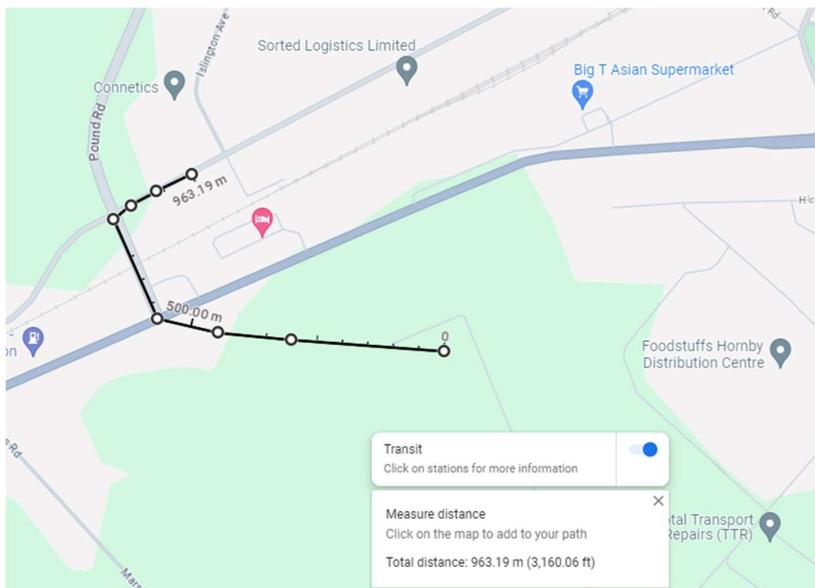


Figure 11: Walk time Option 2 : Bus Stop on Waterloo Road, very direct across green fields to proposed site (Distance is 963 m = 14 mins)



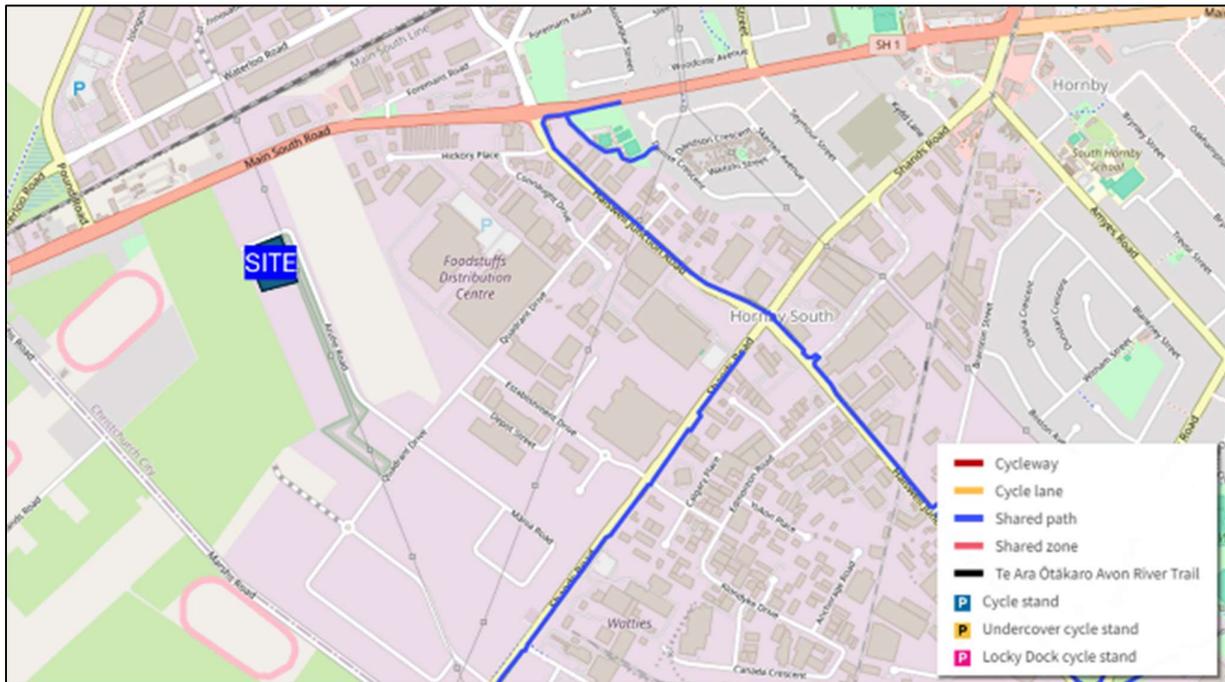
5.2 Walking and cycling accessibility

Based on the accessibility maps published by Council in Appendix 4C of the Integrated Transport Assessment Guidelines, the Site has the following accessibility metrics relating to cycling

- ♦ excellent access to employment by cycling (100,000 jobs)
- ♦ excellent access to centres (Central City).

Figure 12 below shows shared paths available on Halswell Junction Road and Shands Road. We do note that Google Maps identifies uni-directional cycle lanes which exist on Halswell Junction Road and Main South Road.

Figure 12: Nearby cycle facilities³



Furthermore, Bruce Stewart Drive has been constructed with cycle lanes, as can be seen in Figure 13.

³ Christchurch cycle map, available online at <https://ccc.govt.nz/transport/cycling/cycling-maps>

Figure 13: Bruce Stewart Drive/Shands Road signalised intersection with cycling provision



Quadrant Drive and Aruhe Road are very wide roads, with space to accommodate cyclists and vehicles alongside parked vehicles without presenting pinch points.

Concerning pedestrians, all roads surrounding the proposal have footpaths on both sides with pram crossings at intersections.

As such we consider the Site has good access for pedestrians and cyclists.

5.3 Private vehicle accessibility

Based on the accessibility maps published by Council in Appendix 4C of the Integrated Transport Assessment Guidelines, the Site has the following accessibility metrics relating to private vehicles

- ◆ Excellent access to employment (100,000 jobs)
- ◆ Excellent access to centres (Riccarton and Central City).

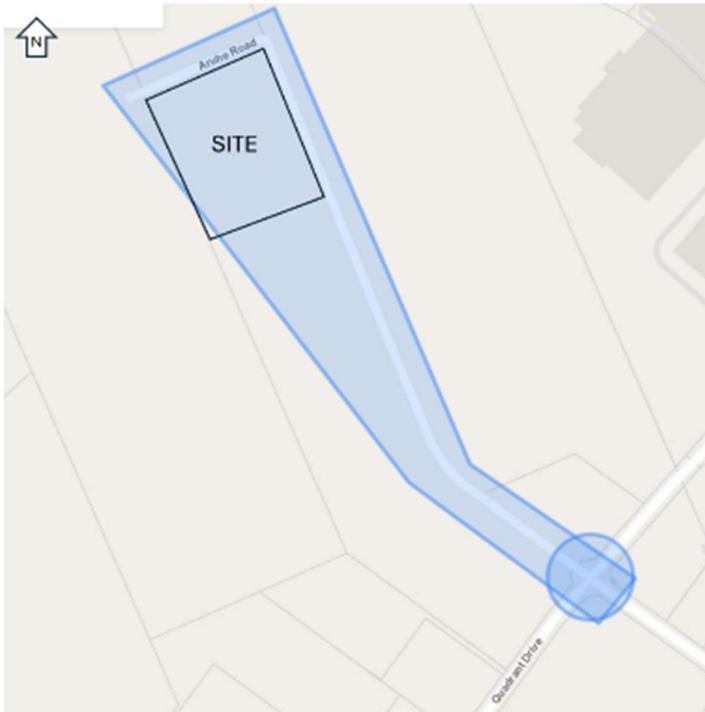
The Site has ready access to the arterial road network via Shands Road and Halswell Junction Road which are classified as a Major Arterial roads. These provide connections to State Highway 1 and State Highway 76, north and south of the Site respectively.

5.4 Safety of the adjacent transport network

A historical search of the New Zealand Transport Agency's (NZTA) Crash Analysis System (CAS) has been completed for the five-year period from 2019 to 2024 (inclusive) which is the most recent, complete five-year period available. Our search area is shown below in Figure 14 which includes the full length of Aruhe Road and a 50 m radius of Aruhe Road/Quadrant Drive intersection.

Records show that no crashes have occurred at this intersection which is to be expected since Aruhe Road is newly constructed and the majority of the lots on Aruhe Road are unoccupied. Notwithstanding that, we do not see any safety issues with the surrounding roads nor intersection, given they have good visibility from all approaches and have been designed for large heavy vehicles in this industrial area.

Figure 14: CAS search area in blue and site location (indicative only)



6 DISTRICT PLAN ASSESSMENT

6.1 Vehicle crossing and access

The Site will operate using 3 vehicle crossings; one existing on the eastern side and two proposed on the northern side. This is to facilitate a clockwise circulation inside the Site for most vehicles (in from the east, out from the north) and to have a separate vehicle access for the visitor car parking area.

The vehicle crossing widths are:

- ◆ The existing vehicle crossing on the eastern side is 12.0 m wide and will serve as two-way access; entry for all vehicles and exit for vehicles that will need to use the weigh bridge (trucks carrying fibre and green fuel).
- ◆ The vehicle crossing on the northern side is exit only, proposed to be 7.5 m wide.
- ◆ The vehicle crossing on the north westernmost side is two-way for the visitor car parking and is proposed to be 7.0 m wide.

With regard to the location and number of the vehicle crossings:

- ◆ The number of vehicle crossings comply with the maximum number of crossings per Site in the District Plan, given that the northern boundary is 116 m long and the eastern boundary is 257 m long, and the District Plan allows 3 vehicle crossings onto each local road frontages.
- ◆ The western (exit only) vehicle crossing is located 113 m from the bend of Aruhe Road (measured from the edge of the carriageway to the nearest side of the vehicle crossing). The existing vehicle crossing is 93 m from the bend. While not an intersection, similar safety principles apply and the proposed locations comply with the minimum separation distances to an intersection as specified in the District Plan, which is 10 m to a local road intersection.

The vehicle crossings ensure that safety for all footpath users and road users can be maintained:

- ◆ A gate is proposed at the eastern entrance. This setback distance is sufficient for a B-train (20 m long) to wait inside the Site without overhanging the footpath nor carriageway.
- ◆ The dual entry/exit on the eastern side is set back 32 m from the carriageway and 28 m from the footpath, as such the minimum 2x5 m visibility splay contained in Appendix 7.5.9 in the District Plan is exceeded.
- ◆ The fencing next to the two vehicle crossings on the eastern side of the Site will be visually permeable near the access, as such will provide drivers intervisibility towards the footpath and the road.
- ◆ The vehicle crossing on the eastern side of the Site presents a pinch point at the kerbside and within the Site on the weighbridge (as vehicles exiting from this access may need to be weighed). As such, if two B-trains are approaching from opposing directions, one will need to give way.
 - The number of vehicles that need to exit out from this vehicle crossing is 8 per day maximum, as such the likelihood of this two-way conflict is low.
 - The Site is a large and provides waiting areas on both sides of the weighbridge.

- The Site setback from the footpath (28 m) also provides space to give-way on the vehicle crossing, should a truck need to pass each other on the vehicle crossing.
- Furthermore Aruhe Road is wide and flat, providing good visibility to and from the vehicle crossing, as such a truck about to enter the Site can see another truck entering and vice versa.

The Proposal complies with all vehicle crossing and access standards in the District Plan and the proposed arrangement will be able to accommodate the activity on site safely and practically.

6.2 Car parking layout and provision

A total of 20 car parking spaces are proposed. Within the visitor car parking area there are currently proposed;

- ◆ eight 90-degree parking spaces; 2.5 m wide, 5.0 m long with a 7.0 m aisle.
- ◆ two accessible parking spaces, a total of 3.5 m wide which includes a shared painted hatched area next to them. Potentially one of these could be converted or initially be an EV charging station. This would then potentially provide 1 accessible parking space which according to Table 7.5.1.1 is compliant.

The above visitor car parking spaces are accessed via the north westernmost vehicle crossing. This provides safe manoeuvring that is separated from the rest of vehicle movements within the proposed Site.

Within the main area of the Site, for staff and contractors, in the final design it is anticipated to be 10, but currently there are

- ◆ eight 90-degree parking spaces are proposed; 2.5 m wide, 5.0 m long with a 10.5 m aisle.

These parking spaces are accessed via the main entrance. Staff using these car parking area would be familiar with the Site, as such safety effects arising from the trucks conflicting with cars are mitigated. The additional two parking bays may be elsewhere on site and will be finalised once the final layout is confirmed.

These dimensions comply with the minimum dimensions for medium-term parking set out in the District Plan. We have demonstrated in the swept path analysis in Appendix C, that the proposed dimensions are usable for the standard 85th percentile car and all cars can exit the Site in forward gear.

The Site is flat and will meet the maximum gradients specified in standard 7.4.3.5 Gradient of parking and loading areas in the District Plan.

6.3 Cycling provision

Industrial activities are required to provide the following as per Table 7.5.2.1 – Minimum numbers of cycle parks required

- ◆ 1 bicycle parking space per 1,000 m² of GFA for visitors
- ◆ 1 bicycle parking space per 500 m² of GFA for staff.

For the proposed 9,279 m² of GFA, 9 bicycle parking spaces for visitors and 18 bicycle parking spaces for staff are required. The total required as per the calculated GFA is then 27 bike spaces.

The Proposal currently provides bike storage in the visitor car parking area for 11 bicycles. This is to be utilised by both staff and visitors, there is no distinction made for who is using the facility. This is 16 short of the requirements. We propose this is acceptable given the proposed land use and the manner in which the GFA is calculated, being predominantly non human accessible infrastructure. However, that said, the applicant will consider, should demand increase for cycle facilities, increasing the provision.

6.4 Loading and circulation

Industrial activities are required to provide as per table 7.5.3.1 1 loading bay per 2,000 m² of GFA (as our GFA is 9,279 m² and falls into the 2,000 m² to 10,000 m² band) to accommodate heavy vehicles. No loading bays for 99th percentile cars are required.

For the proposed 9,279 m² of GFA, 5 heavy vehicle loading bays are required, due to the rounding of spaces being over half a space. There are 9 roller doors shown on the current plan, there is one more to be added in the final detail. The end operation involves the depositing of material internally accessed through these roller doors and vehicles unloaded internally with only the liquid feed trucks unloaded externally in the load/unload bay provided. There are various products being deposited and each have their own utility and location. For instance there is liquid feedstock inward, Commercial Green Organic, FOGO, food organic inward and biomass fuel and digestate fertiliser outward. We are satisfied that there is ample provision for the loading and circulation within the site, externally and internally that far exceeds the required 5 bays.

The dimensions of these are larger than the loading space dimensions specified in Table 7.5.3.2 in the District Plan. Refer to the site layout plan as part of the application that shows the types of trucks that will use the various loading areas. The vehicle tracking plans in Appendix C demonstrate that they are able to enter and exit the Site in a forward direction.

7 ASSESSMENT OF POTENTIAL TRANSPORT EFFECTS

The Site will operate generally between 6am to 6pm with some night operations. Using approximate daily vehicle movements provided by the Applicant in Table 1, we have calculated that the Proposal will generate 196 vehicle movements day (vpd) in total (a summation of in and out movements).

Table 1: Daily Trip generation

Vehicle Class	Notes and approximate daily vehicle Movements	In	Out	Total Movements
Kerbside Collection Trucks	kerbside collection trucks. Max 20/hr	45	45	90
Commercial Green organic	10 Commercial green waste (6 wheeler) or 5 truck and trailers	10	10	20
Truck and trailer liquid feedstock	3-4	4	4	8
Curtain sider Commercial food	1-3	3	3	6
staff cars	10	10	10	20
Visitor vehicles	10	10	10	20
Contractor vehicles	2	2	2	4
truck and trailer fertiliser and fuel loadout	Between 7 and 13. Note that only a maximum of 5 need to use the weighbridge.	13	13	26
Non Organic Removal Truck	1 (non peak)	1	1	2
	Totals	98	98	196

To supplement the supplied data, the applicant provided weighbridge data from Bromley for the period 1 July 2022 to 30 June 2023. The weighbridge captured 100% of truck movements to the site that we would expect would use the proposed site (namely kerb side collections and commercial operations).

For all movements in this annual period captured into each hour the following table 2 demonstrates the total number of recorded trips in by hour;

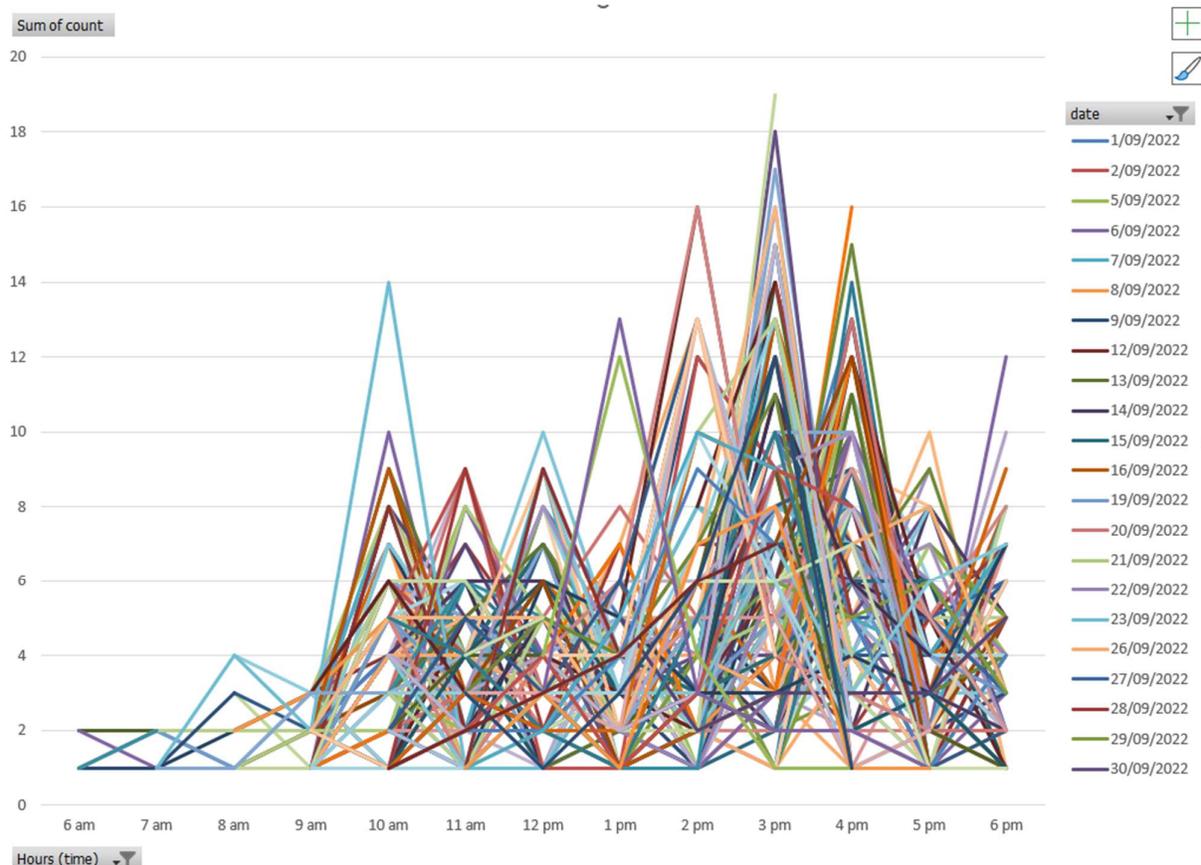
Table 2: Weighbridge Full year hourly traffic

	⊕ 6 am	⊕ 7 am	⊕ 8 am	⊕ 9 am	⊕ 10 am	⊕ 11 am	⊕ 12 pm	⊕ 1 pm	⊕ 2 pm	⊕ 4 pm	⊕ 5 pm	⊕ 6 pm
Sum of count	38	53	84	174	826	782	993	820	1052	1472	582	549

Further analysis suggests that there is seasonality and variances, so the hourly profile for all trips recorded between September 2022 to May 2023 are presented in Figure 14. We have removed the

months June, July and August 2022 (winter months) as they are the lowest total recorded months and the graph can only show 255 lines of data.

Figure 14: Recorded vehicles in at the Weighbridge (9 highest months of data)



What is evident from the graph is that activity on the site starts from 9 AM and drops off from 4 PM. We believe this suggests that it operates outside of network traffic peaks.

To calculate the peak hour vehicle movements for this proposal, we used a combination of the provided information in Table 1 and a supplied data collection from Bromley on the weigh bridge operation. We observed from the data that the arrival timing of the operational vehicles to the site are highly unpredictable, there are many factors in when vehicles access the site.

What we also observed in the Bromley data is that the peak activities cluster around the mid afternoon time and not in the AM or PM network peak.

To calculate what could be generated in the morning (AM) and evening (PM) network peaks, which is a typical approach for transport network assessments, we have made assumptions on each vehicle class and the anticipated movements in the network peak hour, for instance we were informed that the rubbish trucks would not operate in network peak for the site. Equally if the site operations commence at 6 AM, this is at the very least 1 hour before 7 AM which could be argued is the earliest a network peak hour could start.

The summary output of our assumptions for the peak hour calculations are presented in Table 2.

We have made the following assumptions;

- ◆ Kerbside collection trucks hits peak 20 outside of network peak around mid afternoon, so assume 12 movements in network peak (6 in and same 6 out)
- ◆ Commercial green organic, truck and trailer and curtain sider, we assume with no other data that at least 1 vehicle will make a peak hour movement
- ◆ Staff car movements in the AM would be inbound and given the site opens at 6 AM, we assume that the majority of inbound staff are there before 7 am, so have allowed for 2 inbound for the morning peak. In the evening peak, given the operational drop off, we have assumed that 8 staff vehicles outbound may occur in the network peak.
- ◆ Visitor vehicles we assume would not typically arrive in the am peak but have assumed one may at the tail end, so 1 inbound for the AM. For the evening peak we have assumed 3 visitors outbound as a worst case secenario, its highly likely they would have left the site before 4 PM
- ◆ For contractors working on site, we have assumed 1 in for the am and 1 out for the pm as a guess
- ◆ Similarly for the truck and trailer category we have guessed at 1 movement per peak hour in and out
- ◆ No Non-organic removal truck in any peak hour

Table 3: Peak Hour Trip Generation

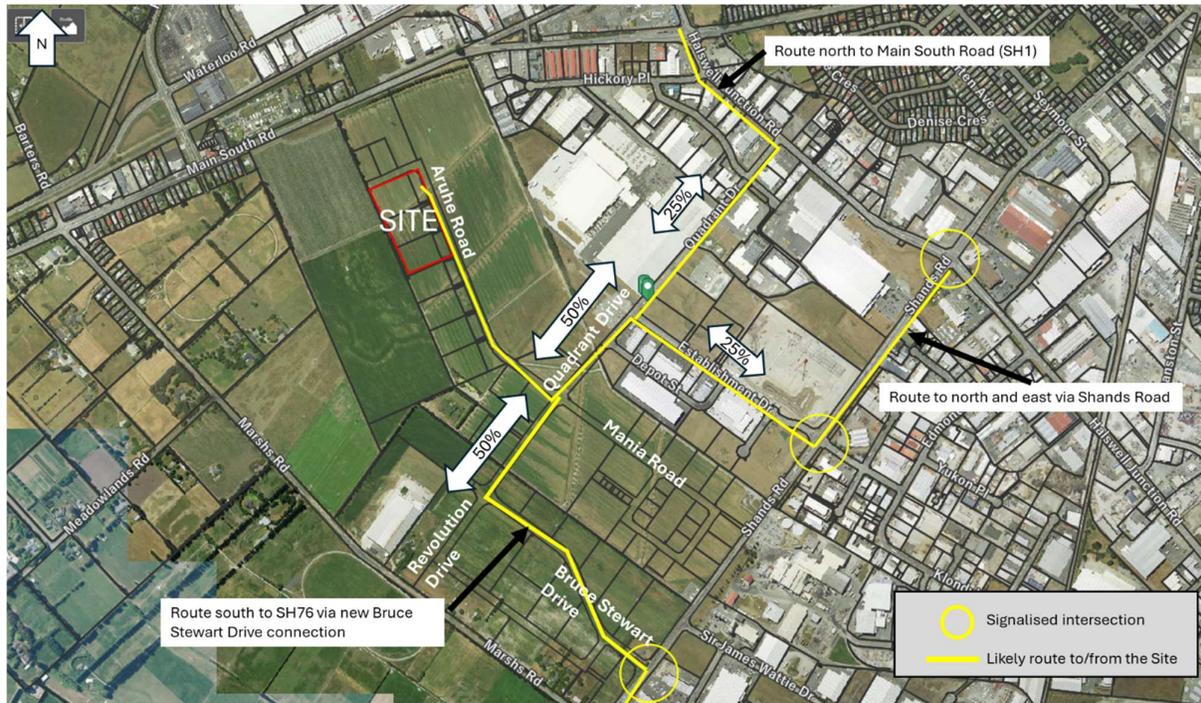
Vehicle Class	AM Network Peak hour			PM Network Peak hour		
	In	Out	Total Movements	In	Out	Total Movements
Kerbside Collection Trucks	6	6	12	6	6	12
Commercial Green organic	1	1	2	1	1	2
Truck and trailer liquid feedstock	1	1	2	1	1	2
Curtain sider Commercial food	1	1	2	1	1	2
staff cars	2	0	2	0	8	8
Visitor vehicles	1	0	1	0	3	3
Contractor vehicles	1	0	1	0	1	1
truck and trailer fertiliser and fuel loadout	1	1	2	1	1	2
Non-organic removal truck	0	0	0	0	0	0
Totals	14	10	24	10	22	32

As summarised in Table 3 : the totals number of movements are 24 for the AM network peak and 32 for the PM network peak.

We anticipate that traffic generated by the Proposal will be distributed onto the Major Arterial roads; Shands Road, Halswell Junction Road and SH76 further south all of which have key intersections which are controlled by traffic signals. The likely routes are illustrated in Figure 15figure 16 showing

- ♦ traffic going to/from the north are likely to use Quadrant Drive and Establishment Drive (both Collector roads) to get to Halswell Junction Road and Shands Road (both Major Arterial roads)
- ♦ Bruce Stewart Drive is now open and this is a suitable route to take to get to/from the south to SH76.

Figure 15: Likely routes to/from Site and assumed split



Given the intersection controls, the recent construction of some of these signalised intersections and parts of the South Hornby area still being developed, we anticipate that there will be plenty of capacity at these key intersections to accommodate the distributed movements presented in table 3 (24 in the AM and 32 in the PM).

If we assume conservatively that the Site traffic is split 50/50 north/south; so half will head north on Quadrant Drive and half will go through Bruce Stewart Drive, this is in the PM peak 16 vph in each of those directions. At the intersection of Quadrant Drive and Establishment Drive, we assume a further 50/50 split for vehicles going north/west to SH1 and the rest going north/east via Shands Road. Therefore, the additional vehicles on Quadrant Drive/Halswell Junction Road and on Shands Road/Establishment Drive is 8 vph at each intersection.

The addition of peak hour volumes based on the distribution at each intersection is anticipated to be low and can be accommodated safely. Furthermore, there are a number of alternative routes to and from the Site that provide good connectivity and offer network resilience.

As a consequence of the low volumes of proposed site traffic in the peak hour, we have not undertaken any junction modelling. The increase of vehicle trips would in our opinion be considered so minimal that the impact would not be noticed once distributed onto the transport network.

From community engagement Flow were informed that there is a strong local desire to keep traffic away from the increasingly trafficked Hornby area to the north east of the site. As previously discussed, we are confident that the most accessible and efficient routes avoid the sensitive area particularly in the network peak periods.

7.1 ODP Matters of Discretion

We have established in the ODP that the “C road” spine road is not complete. We refer to section 16.7.3.9.4 Rooding and Access – Industrial Heavy Zone (South West Hornby) and offer the following commentary with a transport lens:

7.1.1 Transport Network

The proposed site is well serviced from Aruhe Road that connects to Quadrant Drive and then on to the completed section south of the spine road C to Shands Road, which has good strategic connection to Marshs Road, SH76 and Halswell Junction Road. The new infrastructure and signal-controlled junctions have been designed with redundancy to accommodate future traffic growth in the area. We consider the accessibility and amenity of the site to be excellent in the area.

7.1.2 Safety in the Network

Given the redundancy in the network improvements surrounding the site and the industrial area of South West Hornby, the delivery of the new intersections is in accordance with good design practice and compliant design. The localised access to Aruhe Road for the site has no impact on the provided new infrastructure that has been designed to accommodate the vehicle types that will use the proposed site.

7.1.3 Integrated South West Hornby

The proposed site in our opinion sits well in the industrial area and its transport contribution is consistent with intended use of the site.

7.1.4 Construction and Future Operation

The location of the proposed site should not interfere or restrict any future construction or intended operation of other development sites due to its proximity to the boundary of the industrial area and its access from Aruhe Road.

7.1.5 Character and Amenity

The proposed site is currently isolated away from other developments but is in keeping with the industrial feel of the area. In future, other developments will be constructed and neighbour the proposed site. As evidenced in the submission the treatment of transparent fences and peripheral landscape treatments will adequately integrate and reflect back the industrial nature of the area.

8 SAFETY EFFECTS

The Site is located in an Industrial Heavy Zone with nearby land uses being large lots used by industrial activities. All roads and intersections are very wide and have been designed to cater for heavy vehicles.

As mentioned in Section 6.1 previously, the property eastern boundary is set back 32 m from the carriageway and 28 m from the footpath, as such the minimum visibility splay contained in appendix 7.5.9 in the District Plan is exceeded. There is good visibility from Aruhe Road to vehicles exiting from all vehicle crossing, and no structures will obstruct drivers' sightlines.

The visitor car parking area is accessed from a completely separate area to the rest of the main activity on Site, as such manoeuvring of light vehicles associated with users not familiar with the area will not mix with heavy vehicles. This provides for a safe operation and efficiency of the Site.

With the number of vehicle movements anticipated to be generated by the Proposal and given the Site's existing traffic environment, we do not anticipate a heightened safety risk to the surrounding transport network.

9 CONCLUSIONS

The inclusion of the transport matters as part of the design process has produced a safe, efficient and practical on-site solution. The separated visitor parking from the operational and staff movements is a considerable investment by the applicant. The swept path analysis of all vehicles has been undertaken and demonstrate that all the practical elements of design have been optimised on the site.

The traffic generation calculations result in network peak hour generation of 24 in the morning and 32 in the evening, a summation of all entering and exiting movements. We consider that this impact is minimal particularly after the traffic has distributed onto the network. We summarise that traffic to and from the proposed site would avoid the heavily trafficked Halswell Junction and Hornby areas and use the provided infrastructure to access the motorway.

The Proposal is required to be assessed as a Restricted Discretionary activity due to a spine road identified in the Outline Development Plan (ODP) which has not been fully constructed. The Proposal is also classified as a high trip generator under Rule 7.4.3.10 High trip generators. We have also considered the RMA/2022/163 findings and as a consequence propose and have prepared this Basic Integrated Transport Assessment (ITA) under Rule 7.4.2.3. (RD1).

We have assessed the Proposal against all relevant activities and transport standards set out in Chapter 7 of the District Plan, refer to Appendix B, as well as the Area-specific rules for this Industrial Heavy Zone (South West Hornby) contained in Chapter 16 of the District Plan.

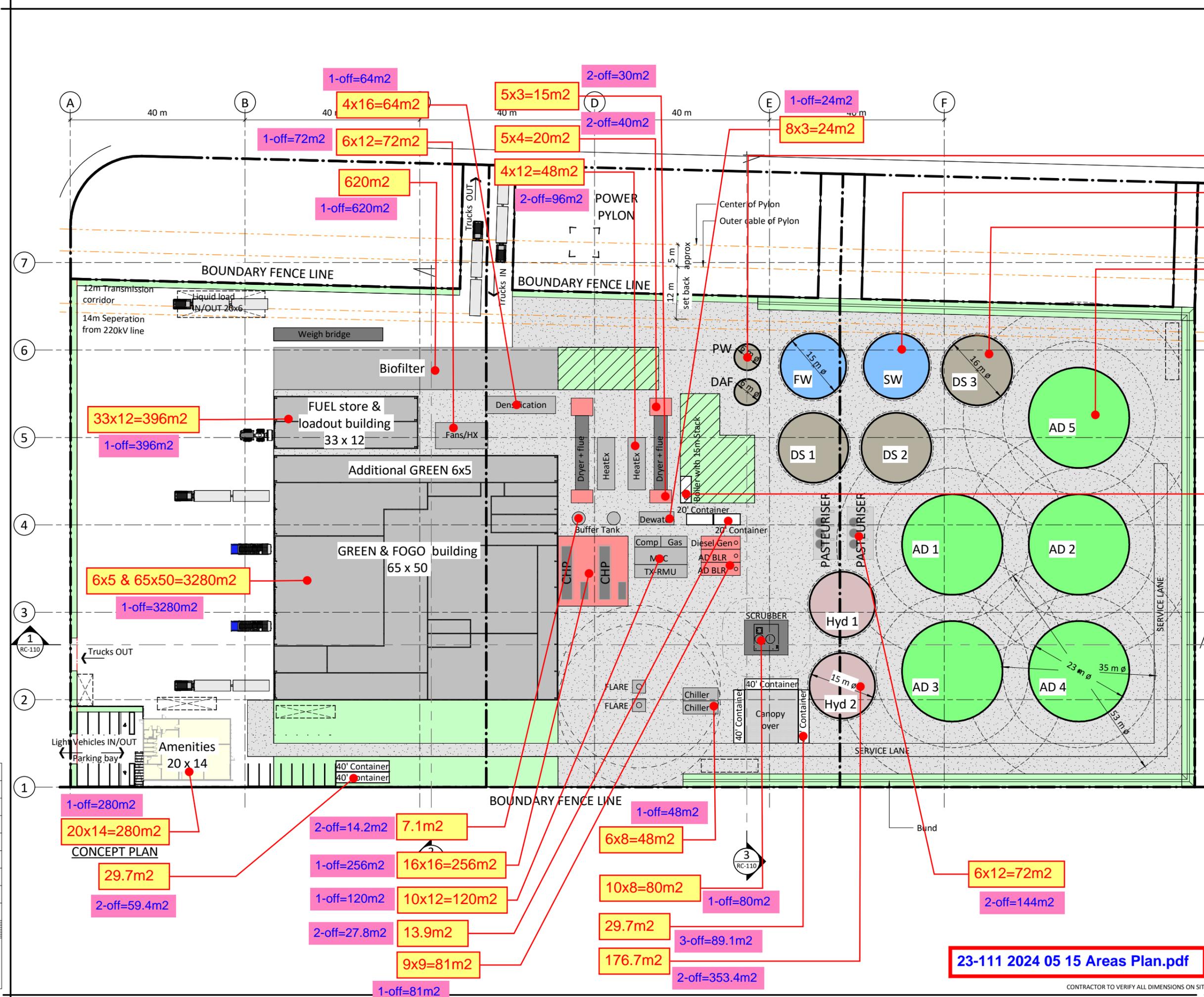
The bicycle non-compliance for this proposal is:

- ◆ The number of bicycle parks is required at 27, the proposal provides 11. The shortfall of 16 can if demand be considered for both staff and visitors elsewhere on site.

We conclude that all practical design matters have been addressed around safety, swept path analysis, parking, visibility, cycling and pedestrian protection.

APPENDIX A

GFA Calculation Drawing



- 28.3m² 2-off=56.6m²
- 176.7m² 2-off=353.4m²
- 201.1m² 3-off=603.3m²
- 415.5m² 5-off=2077.5m²
- 13.9m² 1-off=13.9m²

Area (m ²)	
620.0	
72.0	
64.0	
30.0	
40.0	
96.0	
24.0	
56.6	
353.4	
603.3	
2077.5	
13.9	
144.0	
353.4	
89.1	
80.0	
48.0	
81.0	
27.8	
120.0	
256.0	
14.2	
59.4	
280.0	
3280.0	
396.0	
Sum	9279.6

Designed	Scale	1 : 400	Drawn
Project Start Date	FEBRUARY 2024	Original Size	A1
Job No	23-111	Drawing No	Issue

23-111 2024 05 15 Areas Plan.pdf

CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE

ARCHITECTURAL

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CONCEPT PLAN

APPENDIX B

Chapter 7 assessment

Table 4: Chapter 7 Transport Standards

Chapter 7.4.3 Standard			Assessment
Applicable to	Standard	The Council's discretion shall be limited to the following matters:	
7.4.3.1 Minimum and maximum number and dimensions of car parking spaces required			
(a) Outside of the City Centre			
i. Any car parking spaces available to the general public	Car parking spaces shall be provided with the minimum dimensions in Table 7.5.1.3 in Appendix 7.5.1.	Rule 7.4.4.2 - Parking space dimensions.	Complies
ii. Any activity: a. where standard car parking spaces are provided (except residential developments with less than 3 residential units); or b. containing buildings with a GFA of more than 2,500m ² .	At least the minimum number of mobility parking spaces in accordance with Table 7.5.1.2 in Appendix 7.5.1 shall be provided on the same site as the activity.	Rule 7.4.4.3 - Mobility parking spaces.	Complies
iii. Any activity at the Yaldhurst Recreation and Sports Facility at 466-482 Yaldhurst Road, as shown in Appendix 18.11.4:	a. The minimum number of car parking spaces shall be 67% of the requirements set out in Appendix 7.5.1 Table 7.5.1.1, and shall be provided on the same site as the activity; b. Car parking spaces shall comply with the relevant standards in Rules 7.4.2 and 7.4.3 except as specified in (a) above; and c. The maximum number of car parking spaces shall be 650. If the maximum number of car parking spaces is exceeded, the High Trip Generator Rules 7.4.3.10(xii) and 7.4.4.19.1(l) shall apply.	a. Rule 7.4.4.1 - Minimum number of car parking spaces required. b. Rule 18.10.27 - Additional matters for the Yaldhurst Recreation and Sports Facility. Rule 7.4.4.19 - High Trip Generators.	Does not apply, the Site is not 466 – 472 Yaldhurst Road
(b) Within the of the City Centre			
i. Any activity (except within the Residential Central City Zone)	Any car parking and associated manoeuvre area shall be no greater than 50% of the GLFA of the buildings on the site.	Rule 7.4.4.27 – Car parking areas	Does not apply, site is not within the City Centre
Any car parking spaces provided, except residential activities.	The minimum number of mobility parking spaces in accordance with Appendix 7.5.1 shall be provided on the same site as the activity.	Rule 7.4.4.2 – Parking space dimensions	Does not apply, site is not within the City Centre
ii. Any activity (other than in respect of residential activities): a. where car parking spaces are provided, or b. containing buildings with GFA of more than 2,500m ² .	At least the minimum number of mobility parking spaces in accordance with Table 7.5.1.2 in Appendix 7.5.1 shall be provided on the same site as the activity.	Rule 7.4.4.3 - Mobility parking spaces.	Does not apply, site is not within the City Centre

7.4.3.2 Minimum number of cycle parking facilities required			
a. Any activity	At least the minimum amount of cycle parking facilities in accordance with Appendix 7.5.2 shall be provided on the same site as the activity.	Rule 7.4.4.4 - Minimum number of cycle parking facilities.	<p>Does not Comply</p> <p>Industrial activities are required to provide bicycle parking at the following rate</p> <ul style="list-style-type: none"> ◆ Visitor spaces: 1 space per 1000 m² GFA ◆ Staff spaces: 1 space per 500 m² GFA <p>For the proposed 9,239 m² of building GFA, 9 bicycle parking spaces for visitors and 18 bicycle parking spaces for staff are required. Space for 11 bicycles has been provided in the visitor car park area.</p>
7.4.3.3 Minimum number of loading spaces required			
a. Any activity where standard car parks are provided.	At least the minimum amount of loading spaces in accordance with Appendix 7.5.3 shall be provided on the same site as the activity.	Rule 7.4.4.5 - Minimum number of loading spaces required	<p>Complies</p> <p>Industrial activities are required to provide 1 loading bay per 2,000 m² of GFA to accommodate heavy vehicles (due to the band of 2,000 to 10,000 m²). No loading bays for 99th percentile cars are required.</p> <p>For the proposed 9,239 m² of building GFA, 5 heavy vehicle loading bays are required. An excess of 5 loading bays are provided, refer to the site layout plans as part of the application that shows the various loading areas externally and the provision of more internal loading bays to contribute to the intended operation of the site.</p> <p>The dimensions of these are larger than the loading space dimensions specified in Table 7.5.3.2 in the District Plan and that they are all able to enter and exit the Site in a forward direction. Additionally a separate loading bay is provided on the western corner of the Site, suitable for smaller trucks that needs to park next to the amenities building. This area has plenty of space to accommodate larger trucks.</p>
7.4.3.4 Manoeuvring for parking and loading areas			
a. Any activity with a vehicle access.	On-site manoeuvring area shall be provided in accordance with Appendix 7.5.6.	Rule 7.4.4.6 - Manoeuvring for parking areas and loading areas	<p>Complies</p> <p>All parking spaces and loading areas are designed to ensure all vehicles able to enter and exit the Site in a forward direction (refer to vehicle tracking plans provided in Appendix C)</p>
b. Any activity with a vehicle access to: i. a major arterial road or minor arterial road; or	On-site manoeuvring area shall be provided to ensure that a vehicle can manoeuvre in a forward gear on to and off a site.	Rule 7.4.4.6 - Manoeuvring for parking areas and loading areas	<p>Complies</p> <p>All parking spaces and loading areas are all designed to ensure all vehicles able to enter and exit the Site in a</p>

<ul style="list-style-type: none"> ii. a collector road where three or more car parking spaces are provided on site; or iii. six or more car parking spaces; or iv. a heavy vehicle bay required by Rule 7.4.3.3; or v. a local street or local distributor street within the Central City core; or vi. a main distributor street within the Central City where the vehicle access serves three or more parking spaces; or <p>a local street outside the Central City core and the vehicle access serves six or more parking spaces.</p>			forward direction (refer to vehicle tracking plans provided in Appendix C)
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<ul style="list-style-type: none"> a. All non-residential activities with vehicle access. <ul style="list-style-type: none"> i. Gradient of surfaces at 90 degrees to the angle of parking (i.e. parking stall width) ii. Gradient of surfaces parallel to the angle of parking (i.e. parking stall length). iii. Gradient of mobility parking spaces. 	<ul style="list-style-type: none"> a. Gradient shall be $\leq 1:16$ (6.26%). b. Gradient shall be $\leq 1:20$ (5%). c. Gradient shall be $\leq 1:50$ (2%). 	Rule 7.4.4.7 - Gradient of parking areas and loading areas	Complies
b. 7.4.3.6 Design of parking areas and loading areas			
c. All non-residential activities with parking areas and/or loading areas used during hours of darkness.	Lighting of parking areas and loading areas shall be maintained at a minimum level of two lux, with high uniformity, during the hours of operation.	Rule 7.4.4.8 - Illumination of parking areas and loading areas	Can comply – refer to separate plans as part of the application.
<ul style="list-style-type: none"> d. Any urban activity, except: <ul style="list-style-type: none"> i. residential activities containing less than three car parking spaces; or ii. sites where access is obtained from an unsealed road; or e. temporary activities and buildings 	The surface of all car parking areas, loading areas, and associated access areas shall be formed, sealed and drained and car parking spaces permanently marked.	Rule 7.4.4.9 - Surface of parking areas and loading areas	Complies
7.4.3.7 Access design			
a. Any activity with vehicle access.	Access shall be provided in accordance with Appendix 7.5.7.	Rule 7.4.4.10 - Vehicle access design	Complies
b. Any activity providing 4 or more car parking spaces or residential units.	Queuing Spaces shall be provided in accordance with Appendix 7.5.8	Rule 7.4.4.11 - Queuing spaces	Table 7.5.8.1 : Technically this is compliant since the number of car parking spaces from the main entrance (for staff) is less than 10. i.e. minimum queuing space is zero from local roads, the same can be said for the visitor car parking which has 10 car parking spaces with access from a local road, as such no queueing space is required.
c. Outside the Central City, any vehicle access:	Either an audio and visual method of warning pedestrians of the presence of vehicles or a visibility	Rule 7.4.4.12 - Visibility splay	A visibility splay is provided by the proposed site.

<p>i. to an urban road serving more than 15 car parking spaces or more than 10 heavy vehicle movements per day; and/or</p> <p>ii. on a key pedestrian frontage.</p>	<p>splay in accordance with Appendix 7.5.9 shall be provided. If any part of the access lies within 20m of a Residential Zone any audio method should not operate between 20:00 and 08:00 hours.</p>		
<p>d. Within the Central City, any vehicle access to a road serving more than 15 car parking spaces or more than 10 heavy vehicle movements per day, where the site provides access onto any street within the core.</p>	<p>An audio and visual method of warning pedestrians of the presence of vehicles about to exit the access point shall be provided.</p>	<p>Rule 7.4.4.12 - Visibility splay</p>	<p>Does not apply, Site is not within the City Centre</p>
<p>e. Within the Central City, any vehicle access to a road serving more than 15 car parking spaces or more than 10 heavy vehicle movements per day, in any other location not covered by clause d above.</p>	<p>Either an audio and visual method of warning pedestrians of the presence of vehicles about to exit the access point or a visibility splay in accordance with Appendix 7.5.9 – Visibility splay, shall be provided. If any part of the access lies within 20 metres of a Residential Central City Zone any audio method should not operate between 20:00 and 08:00 hours, except when associated with an emergency service vehicle.</p>	<p>Rule 7.4.4.12 - Visibility splay</p>	<p>Does not apply, Site is not within the City Centre</p>
<p>7.4.3.8 Vehicle crossings</p>			
<p>a. Any activity with a vehicle access to any road or service lane</p>	<p>A vehicle crossing shall be provided constructed from the property boundary to the edge of the carriageway / service lane.</p>	<p>Rule 7.4.4.13 - Vehicle crossing design</p>	<p>Can comply– new/existing/generally complies with Construction Standard Specifications Standard Vehicle crossing detail SD606.</p>
<p>b. Any vehicle crossing on an arterial road or collector road with a speed limit 70 kilometres per hour or greater.</p>	<p>Vehicle crossing shall be provided in accordance with Appendix 7.5.10.</p>	<p>Rule 7.4.4.13 - Vehicle crossing design</p>	<p>Does not apply, Aruhe Road has a posted speed limit of 50 km/h</p>
<p>c. Any vehicle crossing to any land, building or part of a building located in a rural zone, on or in which rural produce is offered for sale by wholesale and/or retail.</p>	<p>Vehicle crossing shall be provided in accordance with Figure 14 in Appendix 7.5.10.</p>	<p>Rule 7.4.4.13 - Vehicle crossing design</p>	<p>Does not apply, the Site is not within a rural zone</p>
<p>d. Any vehicle crossing on a road with a speed limit 70 kilometres per hour or greater.</p>	<p>The minimum spacing to an adjacent vehicle crossing on the same side of the frontage road, shall be in accordance with Table 7.5.11.1 in Appendix 7.5.11.</p>	<p>Rule 7.4.4.14 - Minimum distance between vehicle crossings</p>	<p>Does not apply, Aruhe Road has a posted speed limit of 50 km/h</p>
<p>e. Any activity with a vehicle crossing.</p>	<p>The maximum number of vehicle crossings shall be in accordance with Table 7.5.11.2 (outside the Central City) and Table 7.5.11.3 (within the Central City) in Appendix 7.5.11.</p>	<p>Rule 7.4.4.15 - Maximum number of vehicle crossings</p>	<p>Complies Three vehicle crossings are permitted onto each road frontage; two are proposed on the western frontage and one existing vehicle crossing is proposed to be used on the eastern frontage</p>
<p>f. Any activity with a vehicle crossing.</p>	<p>The minimum distance between a vehicle crossing and an intersection shall be in accordance with the Table 7.5.11.4 (outside the Central City) and Table 7.5.11.5 (within the Central City) in Appendix 7.5.11.</p>	<p>Rule 7.4.4.16 - Minimum distance between vehicle crossings and intersections</p>	<p>Complies Aruhe Road is a local road with a speed limit of 50 km/h. The proposed vehicle crossing is more than the minimum 10 m distance from a local/local road intersection</p>

g. Any vehicle crossing on a rural road.	The minimum sight lines to vehicle crossings shall be provided in accordance with Figure 18 in Appendix 7.5.11.	Rule 7.4.4.17 - Sight lines at vehicle crossings	Does not apply, the Site is not within a rural zone
7.4.3.9 Location of buildings and access in relation to road/rail level crossings			
a. Any new road or access that crosses a railway line.	No new road or access shall cross a railway line.	Rule 7.4.4.18 - Location of buildings and access in relation to rail/road level crossings	Does not apply; the Site is not nearby to a rail level crossing
b. All new road intersections located less than 30 metres from a rail level crossing limit line.	The road intersection shall be designed to give priority to rail movements at the level crossing through road traffic signals.	Rule 7.4.4.18 - Location of buildings and access in relation to rail/road level crossings	Does not apply; the Site is not nearby to a rail level crossing
c. All new vehicle crossings located less than 30 metres from a rail level crossing limit line.	No new vehicle crossing shall be located less than 30 metres from a rail level crossing limit line unless the boundaries of a site do not enable the vehicle crossing to be more than 30 metres from a rail level crossing limit line.	Rule 7.4.4.18 - Location of buildings and access in relation to rail/road level crossings	Does not apply; the Site is not nearby to a rail level crossing
d. Any building located close to a level crossing not controlled by automated warning devices (such as alarms and/or barrier arms).	Buildings shall be located outside of the sight triangles in Appendix 7.5.13.	Rule 7.4.4.18 - Location of buildings and access in relation to rail/road level crossings	Does not apply; the Site is not nearby to a rail level crossing
7.4.3.10 High trip generators			
a. This rule applies to activities located outside the Central City, and activities within the Central City that are not exempt from this rule under b. below, that exceed the following thresholds			Applies
b. Any building located close to a level crossing not controlled by automated warning devices (such as alarms and/or barrier arms).			Does not apply; the Site is not nearby to a rail level crossing
<p>c. Applicable to</p> <ul style="list-style-type: none"> i. Education Activities (Schools). ii. Education Activities (Pre-School). iii. Education Activities (Tertiary Education and Research Activities). iv. Health Care Facilities. v. Industrial Activities (excluding Warehousing and Distribution Activities). <p>High Technology Industrial Activities.</p> <p>Heavy Industrial Activities.</p> <ul style="list-style-type: none"> vi. Industrial Activities (Warehousing and Distribution Activities). vii. Offices. viii. Residential Activities. ix. Retail Activities (excluding factory shops, retail park zones, trade suppliers and food and beverage outlets). 	<p>Resource consent under Rule 7.4.2.2 C1 or Rule 7.4.2.3 RD1 is required for activities with:</p> <ul style="list-style-type: none"> i. More than 150 students ii. More than 50 students iii. More than 250 FTE students iv. More than 500m2 GFA v. More than 5,000m2 GFA vi. More than 10,000m2 GFA vii. More than 1,750m2 GLFA viii. More than 60 Residential units ix. More than 500m2 GLFA x. More than 1,000m2 GFA xi. More than 50 vehicle trips per peak hour or 250 heavy vehicle trips per day (whichever is met first). <p>Peak hour¹ are those hours between 15:00 and 19:00 hours on a weekday.</p>	Rule 7.4.4.19 - High trip generators	<p>Applies. The Proposal is 9,279 m² of GFA when including all the structures and non-habitable buildings and tanks. This exceeds the Heavy Industrial Activity threshold of more than 5,000 m² GFA</p>

<ul style="list-style-type: none"> x. Retail Activities (factory shops, retail park zones, but excluding trade suppliers and food and beverage outlets). xi. Mixed use and other activities (not listed above), except where Rule 7.4.2.1 P11 or Rule 7.4.3.10(c)(xii) below applies. xii. Yaldhurst Recreation and Sports Facility at 466-482 Yaldhurst Road, as shown in Appendix 18.11.4 (all activities within the site including existing, consented and proposed activities). 	<ul style="list-style-type: none"> xii. Resource consent under Rule 7.4.2.3 RD1 is required if: More than 650 vehicle trips per peak hour will be generated by all the activities on the site; and/or More than 650 car parking spaces are proposed on the site. 'Peak hour' is the continuous 60 minute period between 15:00 and 19:00 hours on a weekday when the greatest number of vehicle trips occurs. 		
<p>d. When resource consent under (c) is required:</p> <ul style="list-style-type: none"> i. An Integrated Transport Assessment shall be undertaken for activities that are High Trip Generators (i.e. are controlled or restricted discretionary activities under Rule 7.4.2.2 C1 or Rule 7.4.2.3 RD1). ii. If an Integrated Transport Assessment has already been approved for the site as part of a granted resource consent, then these rules do not apply to any development that is within the scope of that Integrated Transport Assessment and in accordance with the resource consent, unless the resource consent has lapsed. This part of Rule 7.4.3.10 does not apply to the Yaldhurst Recreation and Sports Facility as shown in Appendix 18.11.4. iii. A basic Integrated Transport Assessment shall be undertaken for High Trip Generators that do not exceed the thresholds in 7.4.4.19 Table 7.4.4.19.1. A full Integrated Transport Assessment shall be undertaken for activities that exceed the thresholds in 7.4.4.19 Table 7.4.4.19.1. iv. Guidance on preparing an Integrated Transport Assessment to address the assessment matters in 7.4.4.19 may be obtained from Council's Integrated Transport Assessment Guidelines. v. For the purposes of calculating the thresholds in Rule 7.4.3.10(i) to (xi) (and table 7.4.4.19.1(a) to (k)): A. for existing activities with access to urban roads, the level of trip generation and scale of activity that existed prior to the plan becoming operative will not be included; B. for existing activities with access to rural roads, the level of trip generation and scale of activity that existed prior to the plan becoming operative shall be included; C. for education activities the thresholds in Rule 7.4.3.10 (and table 7.4.4.19.1) shall only apply to any additional traffic generation from a site which increases the number of children, students or FTE students. D. However, A. and C. do not apply if the existing activity's vehicle access arrangements change so that more than 50 vehicle trips per peak hour will use a new vehicle access to the activity and / or the volumes using any existing vehicle access to the activity increases by more than 50 vehicle trips per peak hour. vi. For the purposes of calculating the thresholds in Rule 7.4.3.10(xii) and Table 7.4.4.19.1(l) for the Yaldhurst Recreation and Sports Facility as shown in Appendix 18.11.4, Rules 7.4.3.10(v)(A) to (v)(D) do not apply. vii. Other than as required by viii. or ix. below, the application shall not be publicly or limited notified where: E. the land use activity is otherwise permitted in the zone where it is located and direct vehicle access is not from a state highway or crosses a KiwiRail railway line; or F. the land use activity is otherwise permitted in the zone where it is located and direct vehicle access is from a state highway or crosses a KiwiRail railway line and written approval/s have been provided by the NZ Transport Agency and/or KiwiRail (whichever is relevant); viii. Where written approvals have not been provided under vii. B. above, Council shall give limited notification of the application to the New Zealand Transport Agency and/or KiwiRail only. <p>For a quarrying activity and/or an ancillary aggregates-processing activity in the Rural Quarry Zone, where a vehicle access to the activity is located within 250 metres of a residential unit, the Council shall give limited notification of the application to the owners/occupiers of that residential unit only, unless such approvals have already been provided.</p>			<p>Applies. The Proposal is a Controlled activity under Rule 7.4.2.3 RD1 and we have prepared this Basic ITA.</p>

7.4.3.11 Vehicle access to sites fronting more than one street - Within the Central City			
a. Any new vehicle access.	Vehicle access shall be provided in accordance with Appendix 7.5.15	Rule 7.4.4.22 - Vehicle access to sites fronting more than one street - within the Central City.	Does not apply, Site is not within the City Centre
7.4.3.12 Lane Formation - Within the Central City			
a. Any new Central City lane created.	The legal width of the Central City lane shall be between 6m and 12m and have a minimum height clearance of 4.5m.	Rule 7.4.4.23 - Central City lane formation - within the Central City	Does not apply, Site is not within the City Centre

Summary of Chapter 7 rule infringements:

7.4.2.3 Restricted discretionary activities

1. The activities listed below are restricted discretionary activities.
2. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in the following table and as set out for those matters in [7.4.4](#).

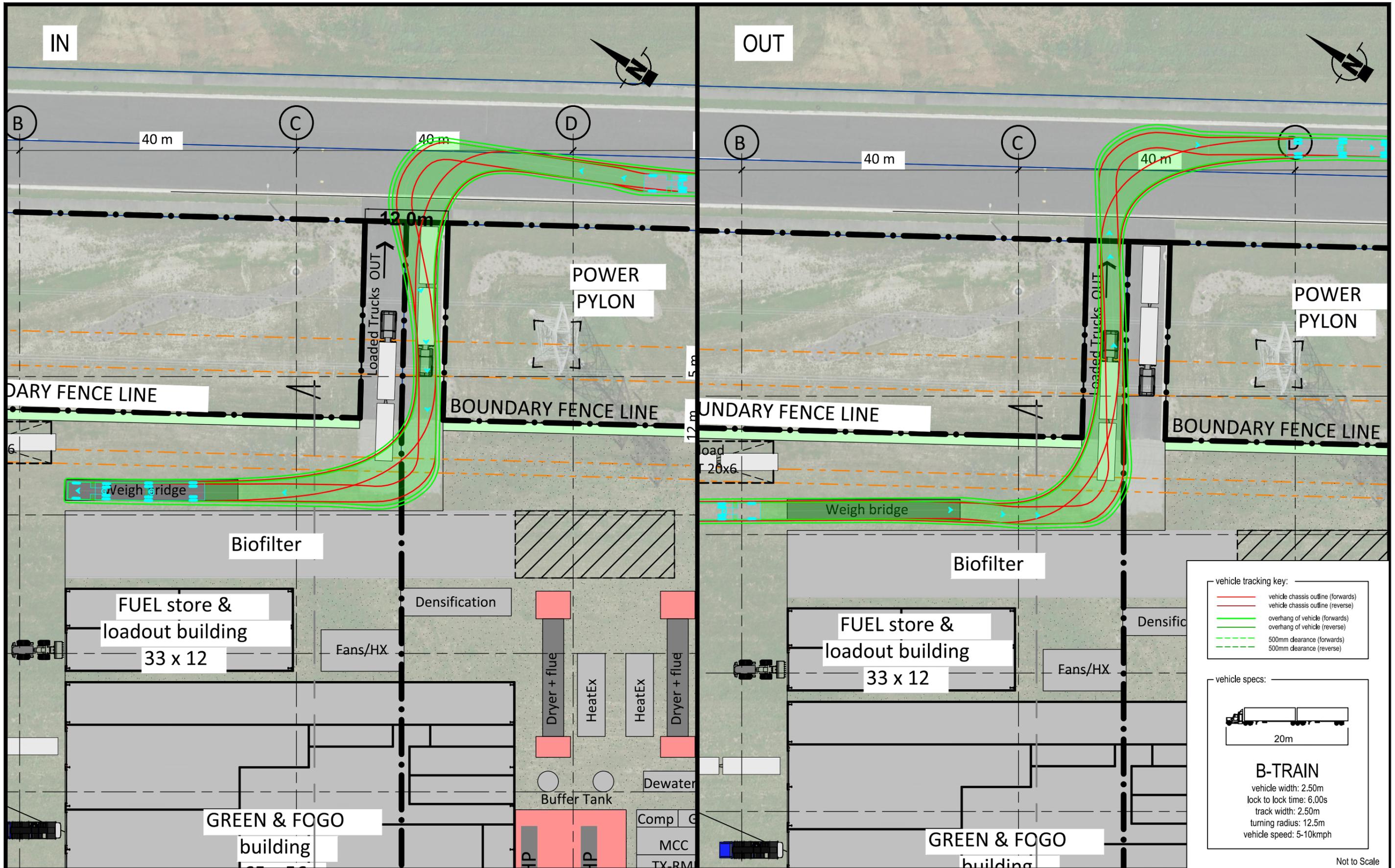
	Activity	The Council's discretion shall be restricted to the following matters:
RD1	<p>1. Any activity that does not meet any one or more of the standards in Rule 7.4.3; or any activity that requires resource consent in accordance with Rule 7.4.3.10 - High trip generators except where otherwise provided for by Rule 7.4.2.2 C1.</p> <p>Advice note:</p> <p>1. Refer to the relevant standards for provisions regarding notification.</p>	<p>1. As relevant to the standard that is not met, and as specified for each standard in Rule 7.4.3:</p> <p>1. Rules 7.4.4.1 - 7.4.4.18 and 7.4.4.21, 7.4.4.22.</p>

Table 5 : Chapter 7 Matters of control

Matters of discretion or control	Comment
Rule 7.4.4.18 - High trip generators	
<p>i. Access and manoeuvring (safety and efficiency): Whether the provision of access and on-site manoeuvring area associated with the activity, including vehicle loading and servicing deliveries, affects the safety, efficiency, accessibility (including for people whose mobility is restricted) of the site, and the transport network (including considering the road classification of the frontage road).</p> <p>ii. Design and Layout: Whether the design and layout of the proposed activity maximises opportunities, to the extent practicable, for travel other than by private car, including providing safe and convenient access for travel by such modes. Within the Northern Homebase Centre, this includes consideration of:</p> <p>A. the provision of pedestrian and cycle access for the public and users of the Centre through the site from Sanctuary Gardens or Havana Gardens to Marshland Road;</p> <p>B. integration of pedestrian and cycle access with development (including building frontages, circulation routes, sightlines and lighting) within the Northern Homebase Centre; and</p> <p>C. any potential safety or nuisance effects and methods to address such effects including by way of a Crime Prevention Through Environmental Design ("CPTED") assessment.</p> <p>iii. Heavy vehicles: For activities that will generate more than 250 heavy vehicle trips per day, whether there are any effects from these trips on the roading infrastructure.</p>	<p>i. The Site layout is designed so that all vehicles are able to exit the Site in a forward manoeuvre (refer to vehicle tracking plans in Appendix C). The visitor car parking area is accessed from a completely separate area to the rest of the main activity on Site, as such manoeuvring of light vehicles associated with users not familiar with the area do not mix with heavy vehicles. This provides for a safe operation and efficiency of the Site.</p> <p>The Site is located on Aruhe Road where the boundary is set back from the road and footpath, as such provides good visibility for vehicles exiting the Site onto the road.</p> <p>ii. The Site is not served by easily accessed public transport but has some cycling provision on the surrounding new roads. The Proposal includes secure bicycle parking to complement the cycling provision on the nearby roads.</p> <p>iii. The Site is not expected to generate more than 250 heavy vehicle trips a day (refer to Section 7).</p>
16.7.3.9.4 Roading and Access – Industrial Heavy Zone (South West Hornby)	
<p>a. The extent to which the location of vehicular access points, the design of the transport network (including road alignment and intersection design within the outline development plan area and connections with the wider network), and the associated vehicle movements (including the type and volume of vehicles) may individually or cumulatively impact on the amenity values of the surrounding area and the safety and efficiency of the transport network.</p> <p>b. The effect of any additional access points on the safety and efficiency of the adjoining road network, having regard to the level and type of traffic using the proposed access point, the location and design of the proposed access point and the adequacy of existing or alternative access points.</p> <p>c. The extent to which the measures for mitigating the effects of development support a comprehensive and integrated approach to development of the South West Hornby industrial area.</p> <p>d. The extent to which the development affects the construction and future operation of the movement network as shown on the outline development plan.</p> <p>e. The extent to which the use of sympathetic design and landscaping treatment integrate the proposed vehicle access into the surrounding rural environment, in particular with regards to character and amenity.</p>	<p>Complies – no impact given max generation is 38 vehicles movements per hour</p>

APPENDIX C

Vehicle tracking plans



vehicle tracking key:

- vehicle chassis outline (forwards)
- - - vehicle chassis outline (reverse)
- overhang of vehicle (forwards)
- - - overhang of vehicle (reverse)
- - - 500mm clearance (forwards)
- - - 500mm clearance (reverse)

vehicle specs:

B-TRAIN
 vehicle width: 2.50m
 lock to lock time: 6.00s
 track width: 2.50m
 turning radius: 12.5m
 vehicle speed: 5-10kmph

Not to Scale

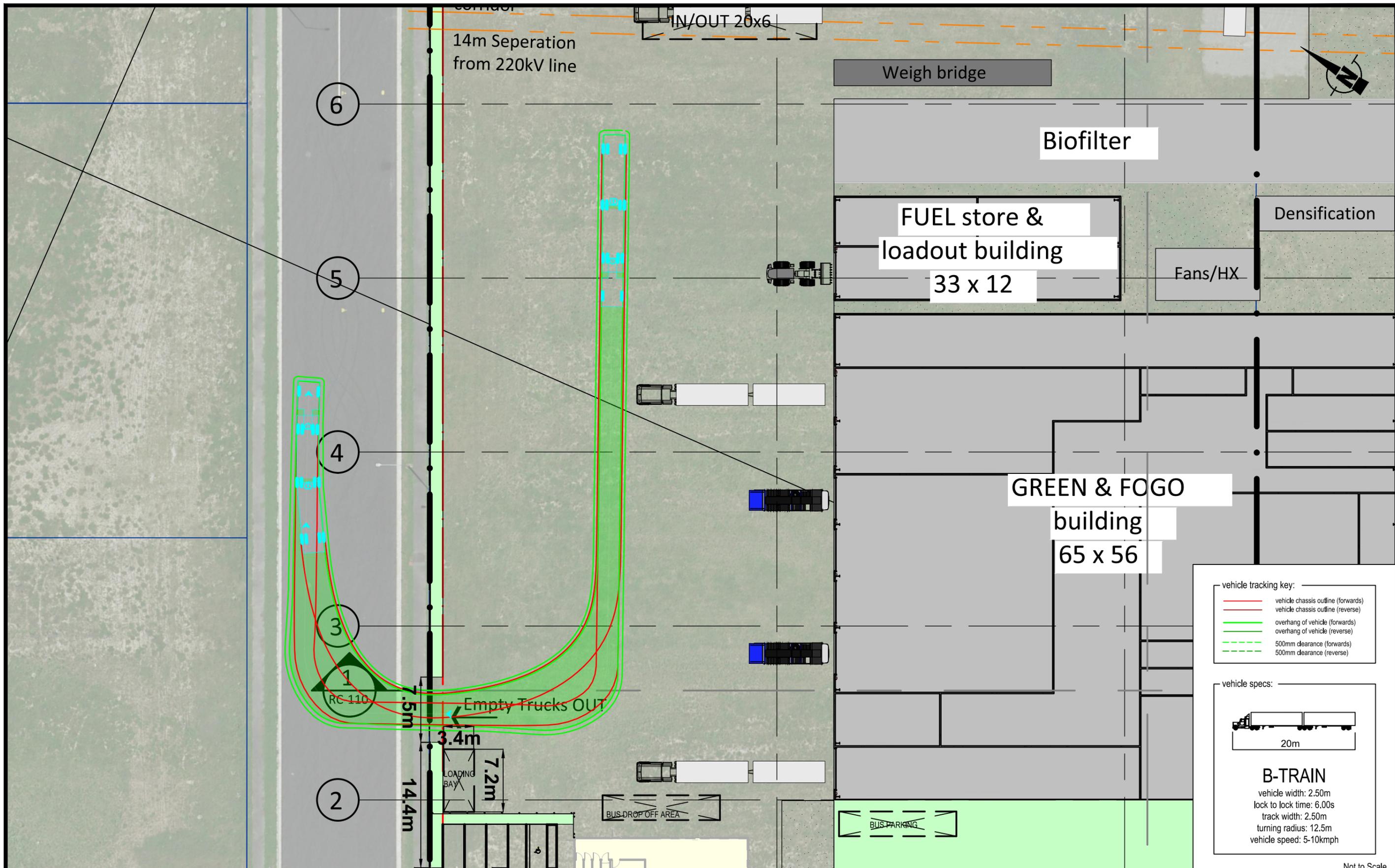
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CLIENT: PIONEER ENERGY
 PROJECT: ECOGAS CHRISTCHURCH
 LOCATION: CHRISTCHURCH
CONCEPT DESIGN

SHEET TITLE: **TRACKING PLANS - 2-WAY ENTRY/EXIT
 20 M TRUCK AND TRAILER (B-TRAIN)**
 DRAWING NUMBER: ECOX001 - DW01 -

SHEET: **01 of 05**
 REV: **A**

flow
 TRANSPORTATION SPECIALISTS
 Level 1, 11 Blake Street, Ponsonby, Auckland | PO Box 47497 Ponsonby
 p 09 970 3820 | f 09 970 3890 | www.flownz.com



vehicle tracking key:

- vehicle chassis outline (forwards)
- vehicle chassis outline (reverse)
- overhang of vehicle (forwards)
- overhang of vehicle (reverse)
- - - 500mm clearance (forwards)
- - - 500mm clearance (reverse)

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B-TRAIN
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Not to Scale

REV	AMENDMENT	DATE OF ISSUE
A	First Issue	15/05/2024

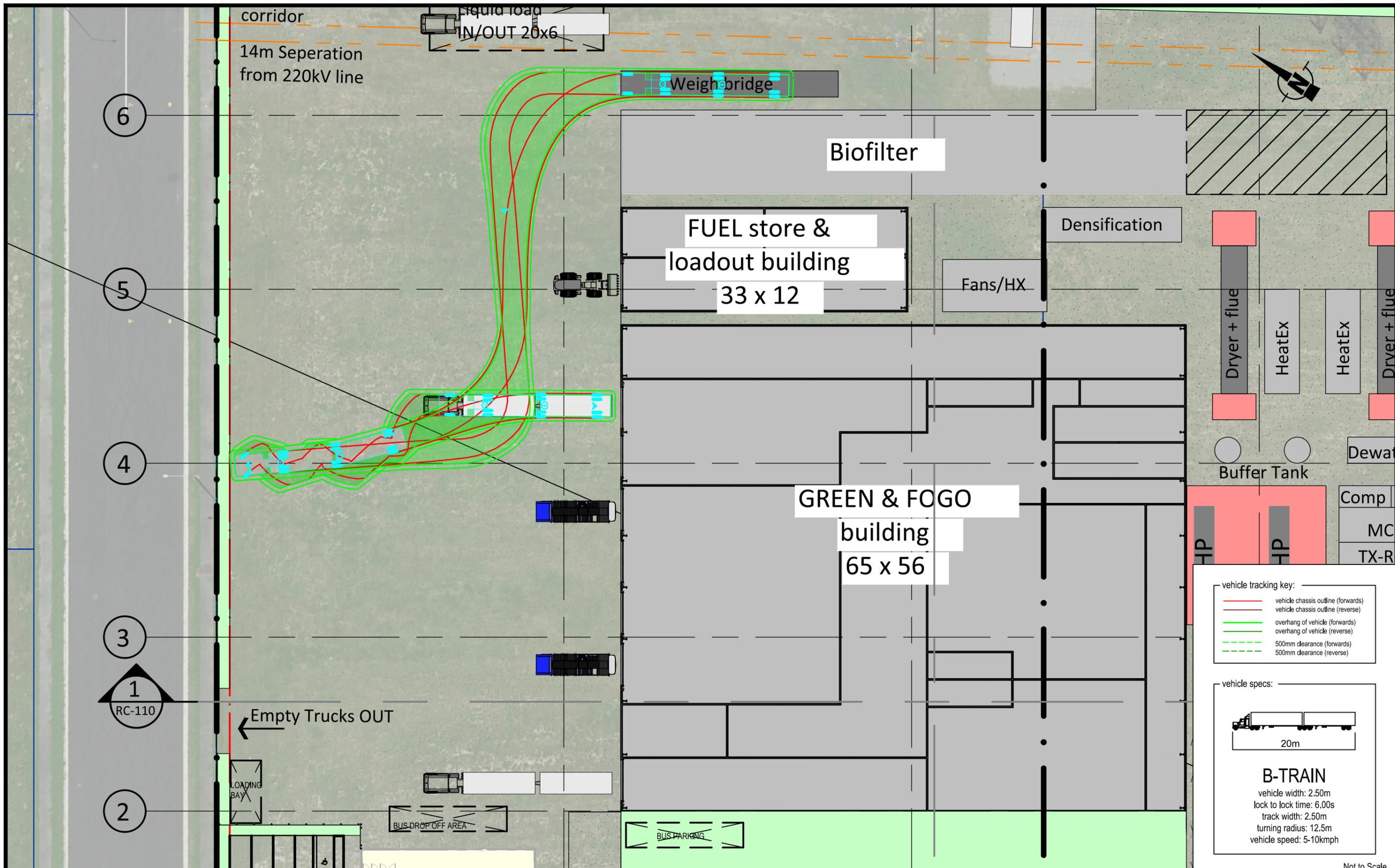
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CHECKED: ET	DATE: 15/05/2024
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CLIENT: PIONEER ENERGY
PROJECT: ECOGAS CHRISTCHURCH
LOCATION: CHRISTCHURCH
CONCEPT DESIGN

SHEET TITLE: TRACKING PLANS - EXITING THE SITE 20 M TRUCK AND TRAILER (B-TRAIN)
DRAWING NUMBER: ECOX001 - DW01 -

SHEET: 02 of 05
REV: A

flow
 TRANSPORTATION SPECIALISTS
 Level 1, 11 Blake Street, Ponsonby, Auckland | PO Box 47497 Ponsonby
 p 09 970 3820 | f 09 970 3890 | www.flownz.com



vehicle tracking key:

- vehicle chassis outline (forwards)
- vehicle chassis outline (reverse)
- overhang of vehicle (forwards)
- overhang of vehicle (reverse)
- 500mm clearance (forwards)
- 500mm clearance (reverse)

vehicle specs:

B-TRAIN
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 lock to lock time: 6.00s
 track width: 2.50m
 turning radius: 12.5m
 vehicle speed: 5-10kmph

Not to Scale

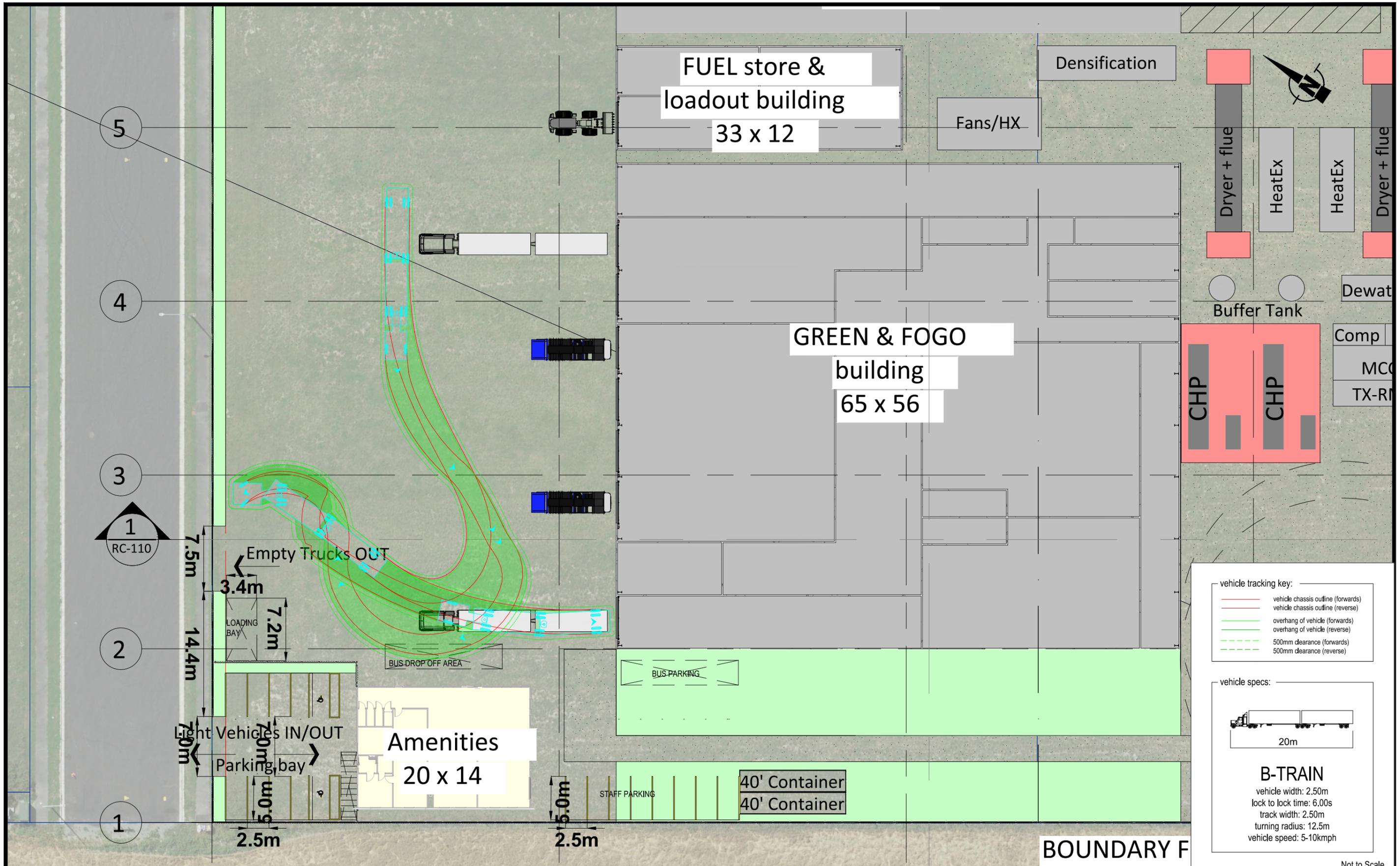
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CLIENT: PIONEER ENERGY
 PROJECT: ECOGAS CHRISTCHURCH
 LOCATION: CHRISTCHURCH
CONCEPT DESIGN

SHEET TITLE: **TRACKING PLANS - SPACE 1**
20 M TRUCK AND TRAILER (B-TRAIN)
 DRAWING NUMBER: ECOX001 - DW01 -

SHEET: **03 of 05**
 REV: **A**

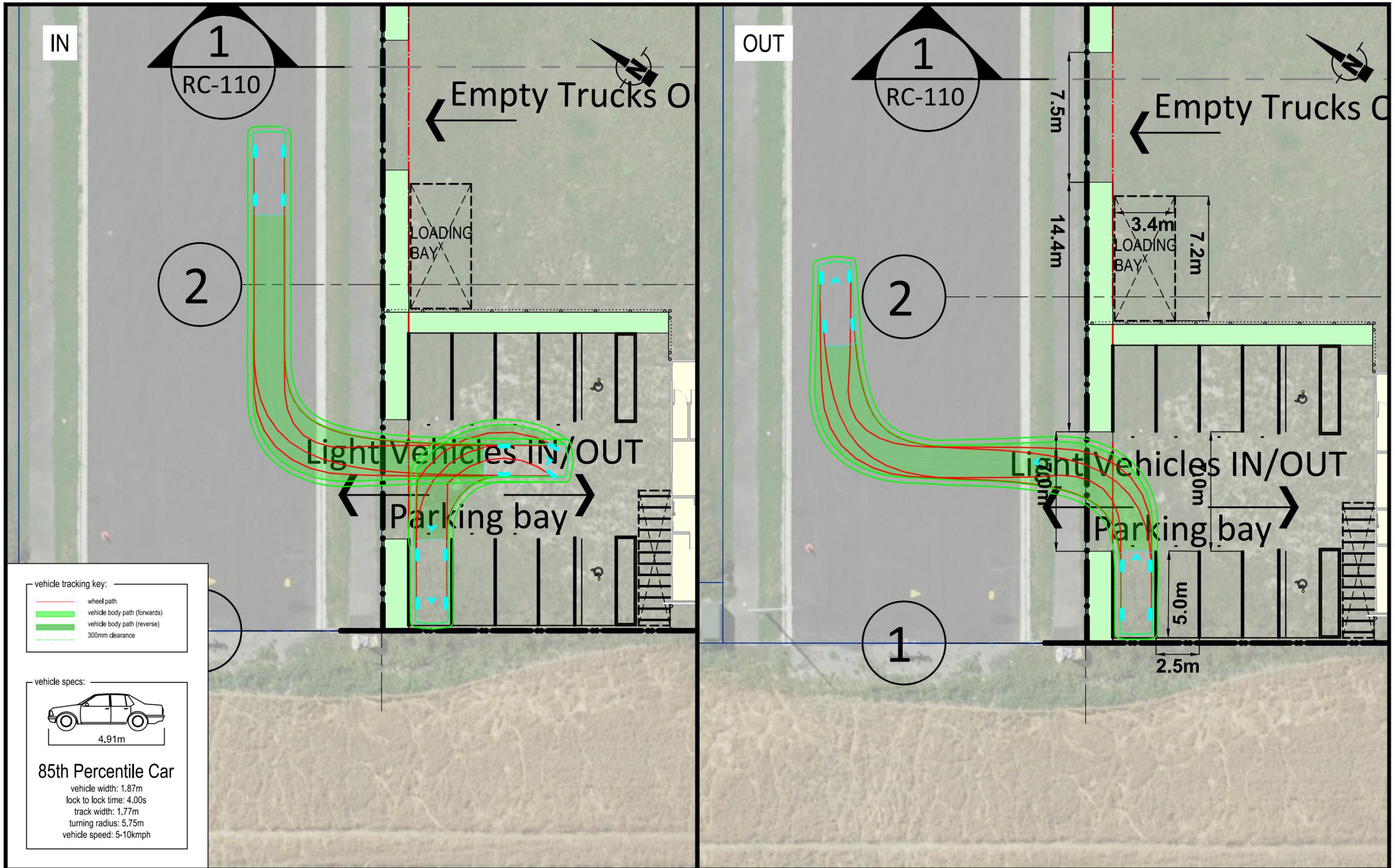
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REV	AMENDMENT	DATE OF ISSUE	DESIGN: KC	DRAWN: KC	CLIENT: PIONEER ENERGY	SHEET TITLE: TRACKING PLANS - SPACE 2	SHEET: 04 of 05
A	First Issue	15/05/2024	CHECKED: ET	DATE: 15/05/2024	PROJECT: ECOGAS CHRISTCHURCH	20 M TRUCK AND TRAILER (B-TRAIN)	
			SCALE: 0	16m	LOCATION: CHRISTCHURCH		
			<p>1:400 @ A3</p>		CONCEPT DESIGN	DRAWING NUMBER: ECOX001 - DW01 -	REV: A

Not to Scale

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vehicle tracking key:

- wheel path
- vehicle body path (forwards)
- vehicle body path (reverse)
- 300mm clearance

vehicle specs:

4.91m

85th Percentile Car

- vehicle width: 1.87m
- lock to lock time: 4.00s
- track width: 1.77m
- turning radius: 5.75m
- vehicle speed: 5-10kmph

REV	AMENDMENT	DATE OF ISSUE	DESIGN: KC	DRAWN: KC	CLIENT: PIONEER ENERGY	SHEET TITLE: TRACKING PLANS	SHEET: 05 of 05	<p>Level 1, 11 Blake Street, Ponsonby, Auckland PO Box 47497 Ponsonby p 09 970 3820 f 09 970 3890 www.flownz.com</p>
A	First Issue	15/05/2024	CHECKED: ET	DATE: 15/05/2024	PROJECT: ECOGAS CHRISTCHURCH	85th PERCENTILE CAR SPACE 1	REV: A	
			SCALE: 0 20m	LOCATION: CHRISTCHURCH	CONCEPT DESIGN	DRAWING NUMBER: ECOX001 - DW01 -		
			1:500 @ A3					

Ecogas Christchurch Organic Processing Facility

Design Features Report

Civil



Issue Authorisation

Issue	Description	Date
A	For Client Review	24 April 2024
B	For Client Review	15 May 2024
C	Resource Consent (Review)	30 May 2024
D	Resource Consent (Review)	07 June 2024
E	Resource Consent (Review)	13 June 2024
F	Resource Consent (Review)	19 June 2024
G	Resource Consent	01 July 2024

Written By:

Brenton Peart

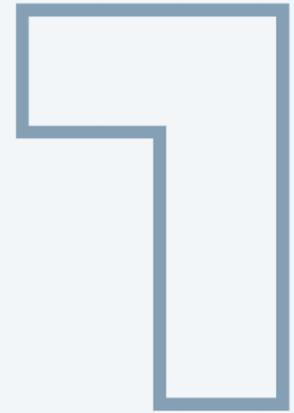
Senior Civil Engineer

B.E Engineering Science (Civil)

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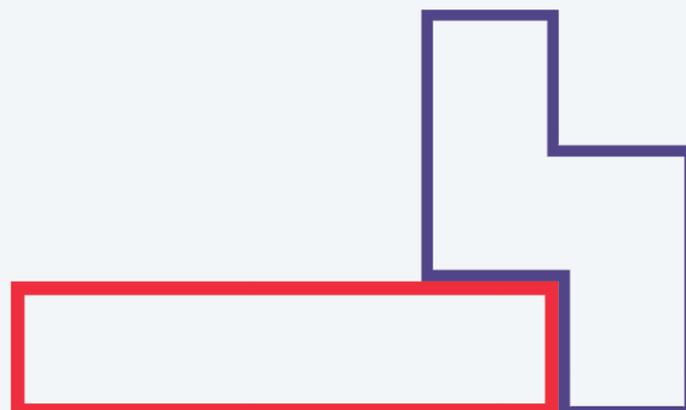
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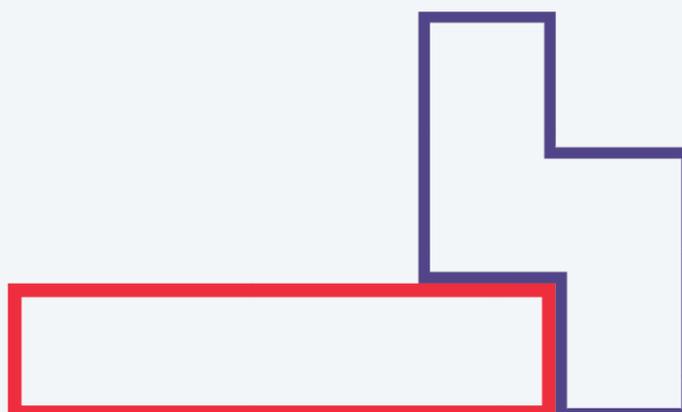
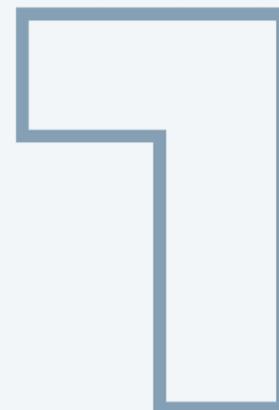
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1. Introduction

Powell Fenwick has been engaged by Pioneer Energy to provide the Civil design services for the proposed Ecogas development, located at 17-21 Aruhe Road, Hornby.

The project consists of the following elements:

- + New industrial buildings
- + New carpark, roading and yard
- + Numerous plant and processing equipment and various large volume storage/process tanks
- + New 3 waters infrastructure reticulated across the site

The construction of the project consists of:

- + Bulk earthworks for the building footprint (documented by the Geotechnical & Structural Engineers requirements - cut depths for the structures have been estimated).
- + Bulk earthworks for the siteworks, including spill containment bund.
- + Carpark, roading and yard construction.
- + Construction/installation of the 3 waters infrastructure, including the back flow prevention, water meter, stormwater and sewer supply (from the building to the site supply point)
- + Stormwater detention and stormwater quality monitoring/diversion systems.
- + Construction of additional the siteworks features (paths, etc).

This Design Features Report (DFR) is a document defining the civil design philosophy, criteria and recording key decisions or outcomes. It outlines 3 waters design, pavement design considerations and design standards referenced.

The DFR is a live document that will be updated as the design and construction proceeds.

2. Location and Site Plan

The proposed Ecogas is located at 17-21 Aruhe Road, Hornby, with a site area of approximately 3 ha.



Figure 1: Site Location, Aruhe Road (Source: Christchurch City Council, 2023)

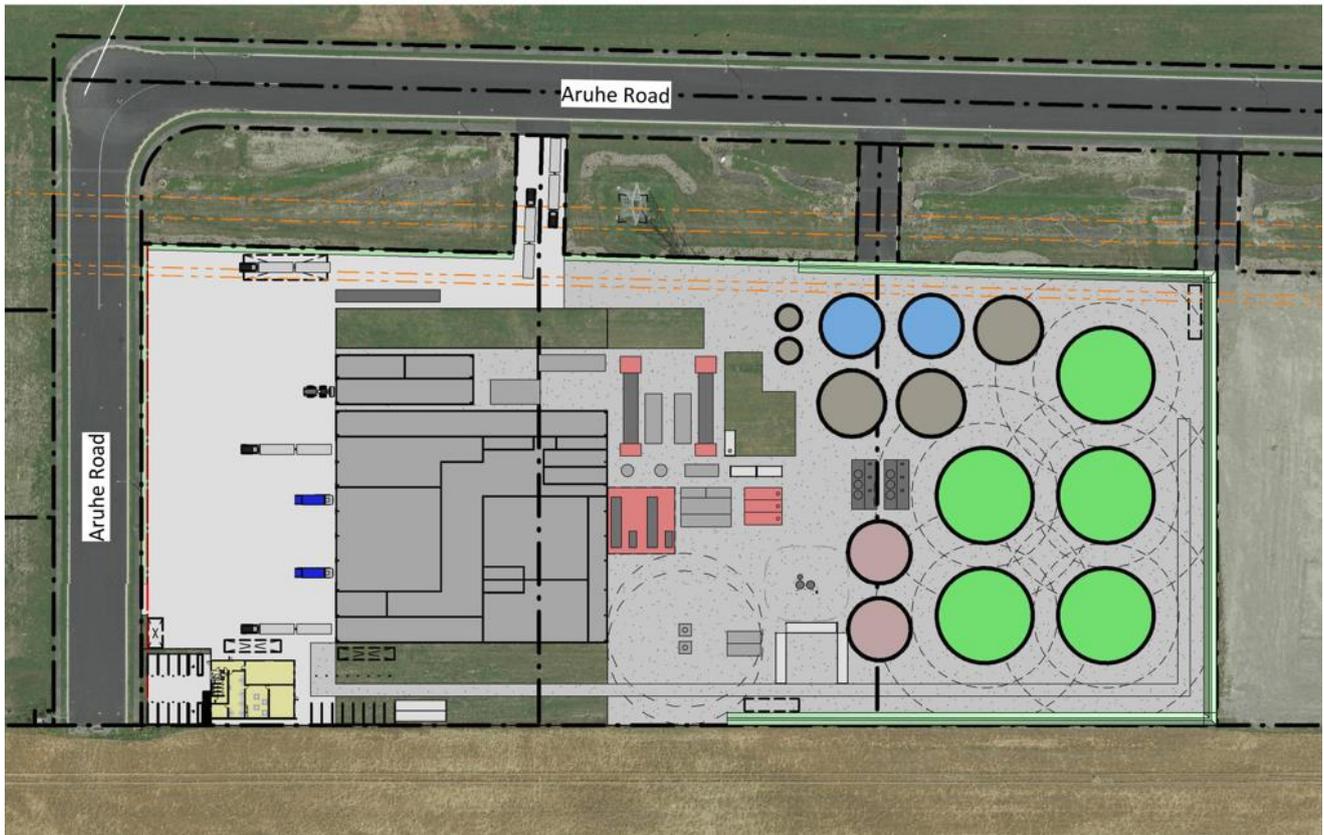


Figure 2: Site Plan (Source: Ecogas, 13 May 2024)

The site is located in the new Mania industrial subdivision in Hornby, with a new road bordering the north and eastern boundaries. The site covers three parcels of the new subdivision.

3. Geotechnical Information

Refer to the Fraser Thomas Geotechnical Report dated 23 April 2024 for the sitewide geotechnical information covering the general conditions and assumptions across the site.

3.1 General Site Conditions

The Geotechnical Report notes the following conditions, as found on site through test pits/further investigations.

- + Topsoil 0.2 - 0.4m deep.
- + Engineered fill found at 0.3 - 0.4m below ground level, with a typical layer thickness of typically 0.2 - 0.7m.
- + Sandy silts and silty sands were found at depths varying from 0.2 - 1.0m below ground level, with a typical layer thickness of 0.3 - 2.5m.
- + Sandy gravels were encountered at depths varying between 1.0 - 1.8m below ground level and beyond.

3.2 Groundwater

The groundwater reported within the Geotechnical investigations was determined to be approximately 12m below ground level.

This depth to ground water allows for the stormwater collected from the building roof to be discharged to ground through the soak pits, which will discharge to the underlying natural gravels.

3.3 Site Topography

The general site levels fall approximately 1m from the northern corner to the southern corner of the site.

3.4 Site Contamination

Eliot Sinclair have been engaged to undertake an assessment on the risk of encountering contamination within the development.

The site validation report concluded that the site has been remediated appropriately, with no further remediation required.

Refer to the report from Eliot Sinclair for further information and for the accidental discovery protocol for when any suspicious or unknown material is encountered on site.

4. Floor & Flood Levels

The Christchurch City Council have outlined that the proposed site is not within any District Plan Flood Management Area or within the District Plan Fixed Minimum Floor Level area.

The Council also noted that the site is not predicted to be affected by the 1 in 50 year or 1 in 200 year flood event.

With the site clear of these constraints, the site levels and floor level were set relative to the adjacent levels in Aruhe Road and the existing levels across the site, as well as balancing the cut and fill across the site.

To ensure pedestrian egress and secondary flow were accounted for, the floor level of the buildings has been set between 44.60m - 44.75m RL.

5. Pavement Design

The Geotechnical investigations have tested the bearing capacity of the engineered fill found on site. This layer is to be suitable for bearing the trafficable pavement. The California Bearing Ratio (CBR), which is typically used to determine adequate bearing and design of pavement thicknesses is to be confirmed on the subgrade.

The preliminary assessment on the pavement design is based on a total cut of the topsoil and interpreting the material encountered within the geotechnical report.

The cut for the pavement is to remove the topsoil and cut down to the underlying engineered fill or natural gravels. The pavement depth is proposed to vary between 350mm - 500mm thick, depending on the proposed new levels. These are to be determined through the detailed design phase of the project.

6. Earthworks

6.1 General

The cut volumes are based on the preliminary site levels as shown on the Preliminary Resource Consent drawings.

The assumptions used in assessing and modelling the initial cut & fill volumes for the development are as follows:

- + Estimated 200-400mm deep topsoil (based on the depth shown in the Geotechnical Report).
- + Cut depth below proposed finished surface levels, including:
 - Trafficked asphalt & pavements 350-500mm (cut to bearing layer below topsoil for pavement design).
- + Cut depth below proposed building, as stipulated in the Geotechnical Report.
 - Building foundations (minimum) 300mm below existing ground level (shallow foundation type).

After removal of the topsoil, areas of the site will require further cut & fill to obtain the required subgrade levels beneath pavement and building.

It is possible that some of the material cut from the site is suitable for reuse in beneath future pavements so not necessarily removed from site. This will be confirmed by geotechnical engineers during detailed design.

The perimeter bund may utilise the excess cut material.

Refer to the table below for the summary, and the earthworks plans.

Table 1: Summary of Estimated Earthworks Volumes

Estimated Earthworks Volumes	
Total Cut	13,000m ³
Total Fill (engineered fill material)	9,300m ³

6.2 Spill Containment Bund

The design of southern half of the site containing the large process tanks has been banded to create a large containment area in the event of any rupture, failure or mishap. The design caters for a failure in the largest AD tank, whereby its entire contents drains into the catchment area, allowing to contain 3,500m³ with an allowance of 200mm of freeboard.

The containment area is sealed except where there is landscaping or left undeveloped for future development. The areas that are to be sealed (asphalt/chip sealed with lined channels) will prevent the contents infiltrating into the ground.

Management of a spill will be covered in the site Environmental Management Plan (EMP) and depending on the situation will use a combination of tanks, pumps and trucks to manage the spill.

7. Process Water

7.1 Water Demand

The water usage for this development is broken down into the following processes:

- + Domestic supply for approximately 15 staff (approximate, allowing for 10 full-time staff and average visitors).

- + Process water for use in the Processing Building (commercial green and food organics) building (use in process and dilution of feedstock etc).
- + Washdown water (provided through recycling or collection of rainwater) within the Processing Building.

The washdown water system will have supply points within the Processing Building hose down. Truck wash water, biofilter irrigation and hose down will utilise roof rainwater in the first instance and potable water when rainwater is not available.

An option to include a specific rainwater storage tank on the Processing Building would allow for the washdown water to be separate from the rest of the process water and also would allow for a mains switchover for potable water to be used when rain water is not available.

The arrangement, management and design of these systems will be confirmed through the detailed design phase

Estimated water demand outlined in the table below.

Table 2 - Water demand

Water Demand	Quantity
Potable water for Staff Amenities	2.25m ³ /day, over 7 days = 3.2m ³ /day, over 5 day equivalent
Washdown operations	7.20m ³ /day, over 7 days = 10.1m ³ /day, over 5 day equivalent
Process water	18,980m ³ /year
Peak (Process water)	96m ³ /day, based on a 5 day week
Average (Process water)	73m ³ /day, based on a 5 day week

Based on the data above, the average demand for the site is 20,500m³ per year, including 830m³ taken from the Christchurch City Council (CCC) supply for potable, plus 25% of washdown water lost (10.1m³ x 260 days x 25% = 660m³).

For the 20,500m³ required for the annual process water demand, 43% can be provided by rainwater (using the historical average rainfall, with a peak runoff coefficient of 0.85, and a reduced coefficient of 0.6 for typical events) and 10% can be provided by washdown water recycling.

This leaves a deficit for the process water of 9,590m³ annually. Of this, the washdown water plus amenities water (830m³ + 2,640m³ = 3,470m³) will be supplied from the CCC water connection supply. The remainder of the demand is to be made up using liquid feedstocks/process water.

CCC have confirmed that the reticulated system providing water to the site is not within any constrained infrastructure and the proposed flow rates are acceptable.

The total average take from the CCC main is 0.13 l/s.

The historical variation between the wettest and driest months is between March and August. The variation between the two opposing months and the monthly process water demand is tabulated below.

Table 3 - Variation in monthly rainfall water take

Month	Monthly Rainfall Volume (m ³)	Process Water Requirements (m ³)	Deficit to be taken from CCC main (m ³)	Deficit to be taken from CCC main (l/s)
March	550	1,925	1,375	0.51
August	930	1,925	995	0.37

7.2 Water Collection

The primary water for the usage in the development is sourced from:

- + Rainwater collection.

+ Potable/town water supply.

Recycled water and spill containment will also be supplied to the stormwater tank for reuse.

7.3 Rainwater Supply

Rainwater supply is captured from the Processing Building, Biomass Fuel Building and Amenities buildings, as well as the carpark area and loading yard.

The rainwater from both the carparks, yard areas and building roof areas is all channelled to the buffer area along the southwestern boundary. This channel is to be lined and conveys the water to a common basin where it is pumped into the tank.

This is described in more detail in the stormwater section of this report.

Refer to the following tables for a summary of the catchments.

Table 4 - Site Catchments for Rainwater Collection

Catchment	Areas (m ²)	Runoff Coefficient
Roof (Processing Building, Biomass Fuel Building & Amenities)	5,000	0.9
Hardstand (Truck yard, carpark etc)	5,600	0.85
Chipseal containment area around tanks	9,000	0.7

Table 5 - Catchment Volumes Generated

Rainfall Period	Annual Catchment (m ³)
Historical Average	8,850
2022-2023	14,650
2023-2024	12,650



Figure 3: Historical rainfall data

8. Water Supply

8.1 Potable Water Supply

The potable water supply is reticulated from the northern boundary of the site to the east of the Processing Building (commercial green and food organics).

The Backflow Preventor (BFP) has been provisionally shown on the project boundary, which will also be placed within an appropriate enclosure.

The internal potable water, hose taps, and the irrigation systems are designed by separate consultants.

8.2 Fire Water Supply

To be provided during the design stage. The fire supply and advice for the design to be provided by the Fire Protection designer.

8.3 Wash Water to Process water

The primary source of wash water from the site (to be collected for process water reuse) will be through the following:

- + Washdown water to keep the floor of the Processing Building clean and tidy.
- + Truck washing (within the Processing Building).
- + Catchment slabs adjacent to key equipment where the likelihood of process liquid discharge to the ground is high through operations or regular maintenance.

All wash water contains valuable nutrient for the process, it will be collected and transferred via a custom drainage system to the process water storage tank. The tank levels will be monitored via the scada system. During a rain event the above outdoor collection systems will run for a short period then revert to discharge to stormwater.

These drainage elements are to be worked through in detailed design and has not yet been shown on the drawings.

9. Operational Phase Stormwater

9.1 General

This reticulated stormwater network will allow for the conveyance of the roof and hardstand water to a buffer basin area, prior to being pumped to the stormwater tank for reuse.

In the event that the buffer area volume is exceeded and the inflow rate exceeds the stormwater tank pump, the stormwater is to pond in the containment area, which is sufficiently sized to hold all storm event up to and including a 1% AEP 72 hour storm event.

In the event that this volume is exceeded, the stormwater is to be discharged in line with the subdivision consent (RMA/2022/163). The stormwater from the building roof areas is to discharge to ground through localised soak pits, with the stormwater collected from hardstand areas being discharged to the CCC reticulated system between the project boundary and Aruhe Road.

The pump is to have a duty of 10m head, with a flow rate of 40-50 l/s.

In the event of a spill, the stormwater system is to be fitted with an automated, constantly monitored valved diversion/shutoff system that is activated when the water has a PH of less than 6 or greater than 9, and/or the water temperature was greater than 25 degrees C, and/or the turbidity value was greater than 500NTU.

These values are to be confirmed and the detailing of the valve arrangement is to be designed under the subsequent phases of the project. Refer to the following sections for more information.

9.2 Design

The data in the figure and tables below outline the design flows for the reticulated stormwater network.

Table 6: Stormwater Design Criteria

Stormwater Design Criteria				
NZBC E1	I(10yr10min) =	61.6	mm/hr	RCP8.5 2081-2100

9.3 Reticulated Scheme

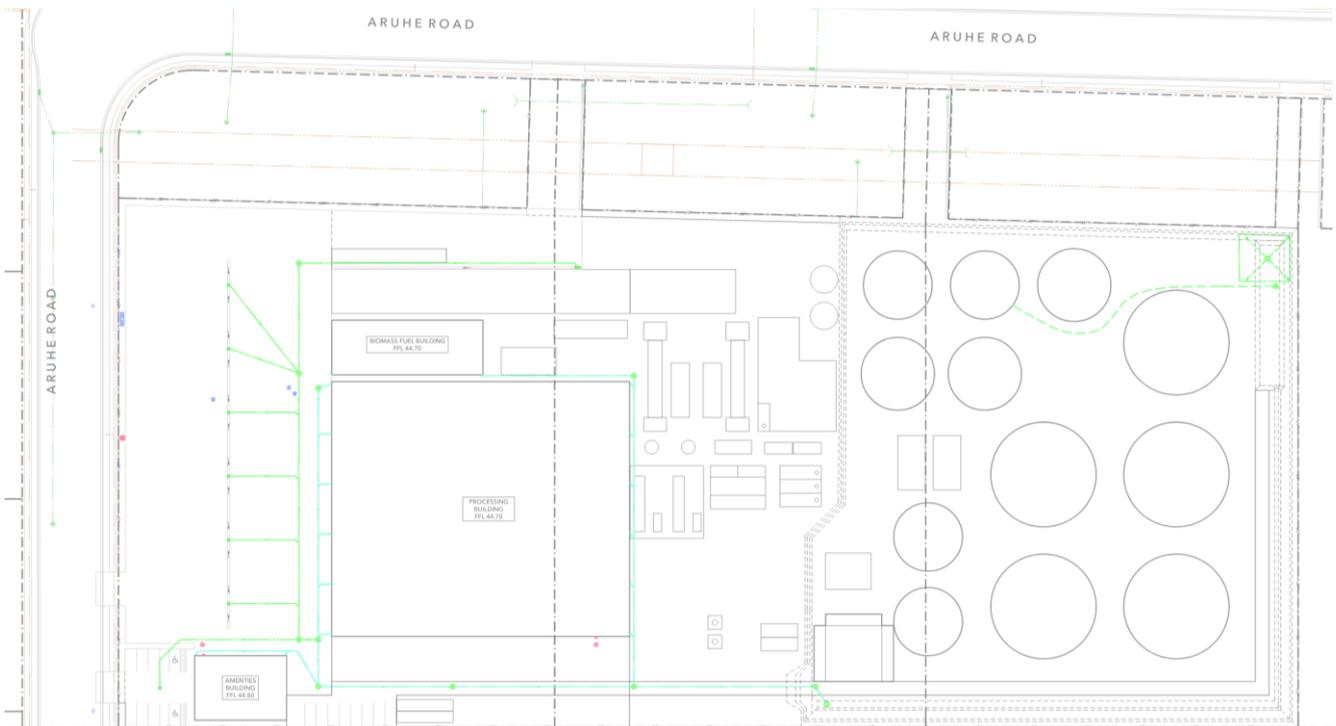


Figure 4: Stormwater Reticulation

The collected water is discharged to a conveyance channel along the southwestern boundary, prior to being collected and discharged to the stormwater buffer area at the southeastern corner of the site.

The open channel has been sized to convey all water across the site to the stormwater buffer area. To ensure the water is all conveyed to the buffer area, the channel is to be PE lined. The channel has been chosen for the design as this eliminates the risk of any spilled gas from the tanks in the containment area dropping into below ground pipework.

The stormwater collected in the buffer area is then pumped to the stormwater storage tank for use in the process facility.

In the extremely unlikely event that the bunded buffer area is full or fills during a large rain event, the stormwater from the roof areas will be able to enter the soak pit(s), and the stormwater from the siteworks is to enter the Council stormwater reticulated network, as required by the CCC subdivision and global discharge consents.

The soak pit for the roof stormwater is to be placed either outside the spill containment area, or have the inlet set above the containment volume level to ensure that no unwanted water/tank spill is discharged to ground, and the discharge is protected by an automatic valve that will shut down the pump to the soak pit(s) and/or CCC reticulated network, in the event that anomalies (pH outside typical limits, increased turbidity, temperature etc) are detected in the water.

The same principle applies to the stormwater collected from the siteworks. This is to be discharged to the CCC reticulated network, however is protected using the same measures.

The automated valve will monitor the quality of the water to ensure that the water being discharged to the CCC networks is clean stormwater only. If abnormal PH or turbidity is detected, the water will not discharge to the CCC network and will instead sit in the buffer area to be tested and managed as per the Environmental Management Plan.

Given the capacity of the stormwater tank and the volume available in the containment area, the above scenarios are unlikely to occur over the lifetime of the operations and is considered for contingency only.

Ecogas operations staff will monitor and undertake maintenance of the stormwater system. They will ensure that the site is maintained in a condition to minimise the sediment loading of any stormwater discharge generated at the site. This includes regular site sweeping, and cleaning of stormwater sumps and buffer containment area.

9.4 Stormwater Treatment Design

In line with the subdivision consent (RMA/2022/163), the CCC reticulated network between the boundary and Aruhe Road (swales and basins) has been designed to provide first flush stormwater treatment for the hardstand runoff.

Gross pollutant treatment is required on the development, which is inherently part of the design of the system (pumps and containment areas).

9.5 Soakage Design

The soak pit for the discharge of roof stormwater is to be designed in accordance with the subdivision consent (RMA/2022/163).

This consent states that the soakage pits are to have capacity to detain and discharge all rainfall and run off up to an including a 2% AEP critical duration storm.

The inlet to the soak pit is to be set above the containment volume RL to ensure that if there is a large spill, the spill material will not enter the soak pit. This does mean that the water that enters the soak pit is required to be pumped.

The provisional design includes a factor of safety of 1.5 with an assumed infiltration rate of 1,000 mm/hr, and allows for flow rates exceeding the allowed pump rate of 40-50 l/s.

An alternative design places a secondary soak pit by the access to the bunded area to manage the stormwater from the area outside the bunded containment area separately. This design assists in reducing the load of the stormwater discharge to the bunded containment area, as well as reducing the load on the pump set and the designed containment volume.

Infiltration testing will be undertaken for the detailed design to verify the design assumptions.

10. Construction Phase Stormwater

The conveyance of the construction phase stormwater is to be managed on site through local diversion channels to a the CCC reticulated system, however the water is to be treated prior to discharge. The treatment is focused on the management and reduction of TSS prior to discharging off site.

This is to be managed through use of a sedimentation basin, or by use of sediment tanks which use laminar plate to drop silt out of the water. The system will be designed to remove the TSS to compliant (ECan & CCC regulated) level prior to discharging to ground.

As the site is not deemed as contaminated, the water to be discharged is to be free of known contaminants and reduced TSS.

The site is to be appropriately controlled for silt and erosion run-off through means of vegetated strips, silt fences, controlled site entries (shaker, wash down points), etc.

CCC have confirmed that the site is appropriately remediated and is the discharge of the construction phase stormwater is to be managed under the CCC Comprehensive Stormwater Network Discharge Consent.

Refer to Appendix C - Erosion & Sediment Control Specification for further information.

11. Spill Containment & Stormwater Storage

In small areas around the AD tanks (largest process tanks in the tank array zone) where the likelihood of process liquid discharge to the ground is high through operations or regular maintenance, a collection slab will direct flow to a sump that will be pumped into the process water storage tank.

The initial stages of rain events will also serve as a wash down of these areas, as the pump system will run for a period to transfer all of the initial runoff to the process water or possibly the stormwater tank.

In the unlikely event of any major rupture, failure or mishap of one of the large AD tanks, the entire area is designed to capture the volume of the tank, 3,500m³ with an allowance of 200mm of freeboard.

As noted in the operational phase stormwater portion of the report, the system is to be fitted with an automated, constantly monitored valved diversion/shutoff system that is activated when the water has a PH of less than 6 or greater than 9, and/or the water temperature was greater than 25 degrees C, and/or the turbidity value was greater than 500NTU (values TBC in detailed design).

In this event, the contents of the tank are to be either pumped into the available tanks for reuse, or be taken off site by trucks. The site Environmental Management Plan will cover the requirements and processes involved with the site cleanup.

When the contents are to remain onsite, this flooded area (pink over page) will be maintained in a pumped down state to ensure that contaminants if any are removed from open storage and pumped to the stormwater storage tank and then distributed for use within the facility processes.

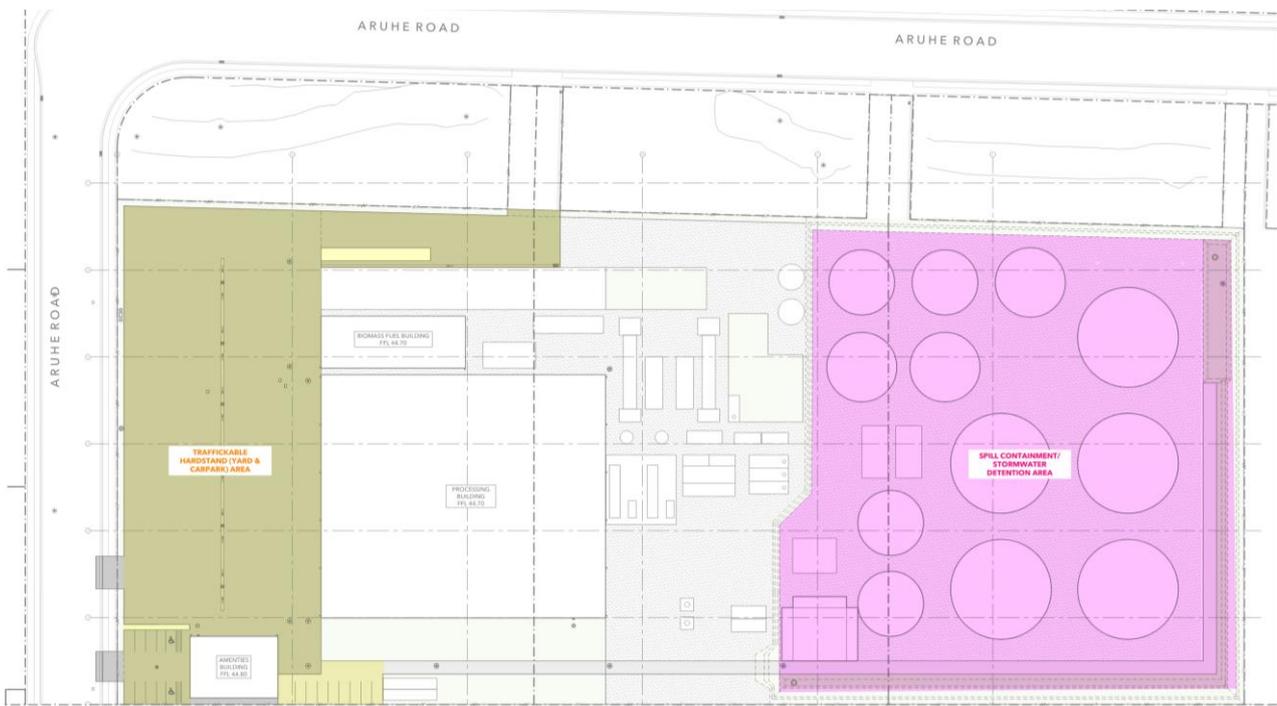


Figure 5 - Spill containment zone in pink

The same process is to be used when both the volume of the stormwater detention basin and the flow rate of the stormwater pump is exceeded. The area is designed to accommodate all design storms up to and including the 1% (1 in 100 year) 72 hour event, while maintaining pumped rates into the stormwater tank.

The maximum anticipated draw down time for any ponded stormwater occurs over a 1 in 100 year 3 hour event, in which the water will reach an approximated maximum ponded depth of 340mm at the southern end of the site, extending 34m to the north. This will take approximately 5.5 hours to drain down 820m³.

In the unlikely event that the largest design storm causes ponding on-site and there is an AD tank failure, the bunded containment area is sufficiently sized to contain all water volume, with the freeboard reducing from 200mm to a minimum of 75mm. Given the unlikely event, this design is considered conservative and the 75mm of freeboard will remain as adequate for this event.

The above parameters and design is to be confirmed through the detailed design phase of the project.

12. Sewer Reticulation

12.1 General

The CCC reticulated system provided in Aruhe Road is a pressurised system, which will require the Ecogas development to connect into via a pump station.

However, prior to discharging to the supplied network, the reticulation within the development will be a mix of traditional gravity and localised pressure system, designed from the building line to the pump station in accordance to AS3500.

The discharge is to comply with a planning rule (RMA/2022/163) to discharge no more than 0.09 litres per second per hectare of land. This equates to 0.27 litres per second for a site area of 2.98ha.

The typical discharge associated with the staff facilities equates an average flow of 0.02-0.03 litres per second.

The peak discharge to the council network is to be managed by the site boundary pump station, which is to be managed by the Christchurch City Council.

The pump station design and detailing is to follow the developed and detailed design phased of the project.

12.2 Design

The data in the figure and tables below outline the design flows for the reticulated foul sewer system.

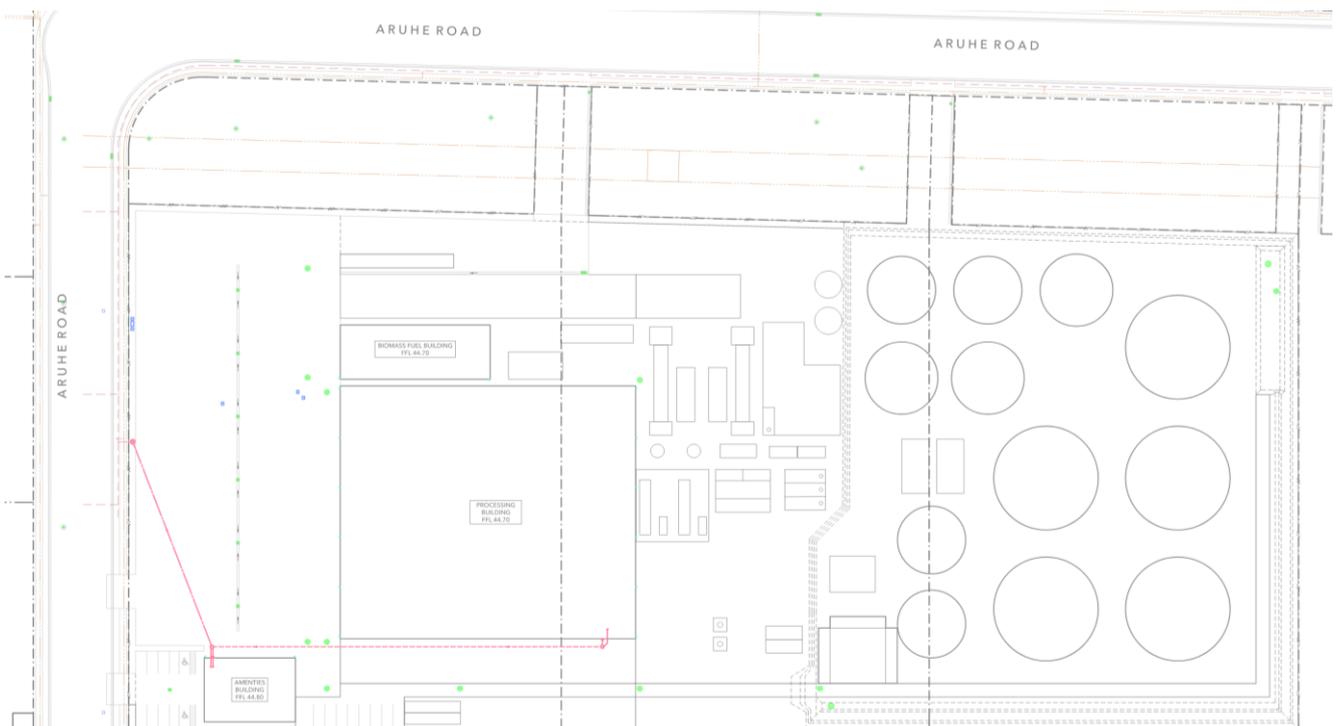


Figure 6: Wastewater Reticulation Network

	Fixture Units (FU's)	Pipe Size (diam, mm)	Design grade
1 (Processing Building)	Approx. 8	100mm	1:60
2 (Amenities)	Approx. 24	100mm	1:80

12.3 Wastewater and Amenities Block

The waste water from the amenities and toilets onsite will be piped to the council reticulation system.

A localised pump chamber for the Processing Building is required to convey the waste to the common main at the Amenities block. This ensures that the wastewater pipework does not become excessively deep.

The main terminates at the northern boundary within a proprietary pump chamber to connect into the CCC pressure networks in Aruhe Road.

13. Network Connections

The site is currently serviced by potable water supplies and wastewater connection points.

The water supply from the North is from CCC main ID 253616.

The wastewater supply North on the north is to connect into a local proprietary pump chamber unit to the CCC requirements. This is to connect into the CCC lateral ID 648360.

14. Erosion & Sediment Control

The erosion and sediment control across the site is to be managed through a variety of controls, including, but not limited to the use of silt fences, sediment retention bunds, sediment tanks, site entry controls (including shakers and truck wash, if required), etc.

Included in Appendix C is the Erosion and Sediment Control specification, however the Erosion and Sediment Control Plan (ESCP) is to be designed and implemented by a Contractor once engaged in the construction of the project. This allows for the Contractor to design and implement a site specific ESCP that works with their construction methodology.

15. Secondary Flow Conditions

No specific considerations for protecting the site is required as the site is not prone to flooding.

The buildings are elevated above the surrounding roads and siteworks, with the main hardstand/yard area being able to overland flow to the Council road, if required.

16. Assessment of Effects

Below is a summary and assessment of the effects of the proposed works that have resource consent implications/requirements.

16.1 Construction phase stormwater

The conveyance of the construction phase stormwater is to be managed on site through local diversion channels to a the CCC reticulated system, however the water is to be treated prior to discharge. The treatment is focused on the management and reduction of TSS prior to discharging off site.

CCC have confirmed that the site is appropriately remediated and is the discharge of the construction phase stormwater is to be managed under the CCC Comprehensive Stormwater Network Discharge Consent.

As the discharge of the stormwater from the site during the construction phase is to be monitored and will be managed through appropriate controls, the risk of the CCC network being negatively affected by the construction phase stormwater discharge is less than minor.

16.2 Operational phase stormwater

The primary use of stormwater across the site is to be captured and pumped into the stormwater tank for use in the facilities processes.

In the event that the stormwater tank is full, any excess roof stormwater is to be discharged to the CCC reticulated network or for the roof water to discharge to site soak pit(s).

The design of the soak pit(s) is to be in line with the subdivision consent (RMA/2022/163).

This consent states that the soakage pits are to have capacity to detain and discharge all rainfall and run off up to an including a 2% AEP critical duration storm.

The inlet to the soak pit is to be set outside the containment area to ensure that if there is a large spill, the spill material will not enter the soak pit.

Infiltration testing will be undertaken for the detailed design to verify the design assumptions.

The roof stormwater runoff can discharge directly to ground via a stormwater treatment filter without risk of contaminants being discharged to ground.

For the portion within the containment area, the stormwater system is fitted with a constant monitoring system that detects set parameters that indicate the introduction of contaminants into the water. The pump managing the stormwater in the containment area will be default be set to pump into the stormwater tank for process use. If the tank fills, the pump shall lift water into the CCC reticulated network connection point, which is set to a height above the spill containment level to mitigate the risk of spill contaminants entering the CCC network. If the constantly monitored sensor detects anomalies in the water, the pump will not discharge to the soak pit.

The arrangement is to be determined during detailed design, however the methodology is considered consistent across both options.

Typical operational process will be to pump rainwater into the stormwater tank over a long duration. The time factor allows for the sensor to detect anomalies, giving the system prior warning before the stormwater tank is full.

In a catastrophic event that a tank ruptures during the largest design storm and the stormwater tank is full, the containment area has sufficient volume to capture all water/liquid, albeit with a reduced freeboard to 75mm. This can be mitigated by increasing the bund height if required.

However, due to the processes on site and the safety management in place through the constantly automated monitoring and the environmental management plan, the risk of contaminants being discharged to the CCC network is low, the risk of contaminated being discharged to ground is very low, and the discharge effects to the ground conditions are less than minor.

16.3 CCC potable water supply

The CCC water take is regarded as minimal for both the potable water usage, wash down operations and for top up of the stormwater tank. As the constant flow and peak flow rates are low, the effects on the CCC system are considered less than minor.

CCC have confirmed that the development can be supplied with the required volume of water without constrains in the CCC network.

16.4 Earthworks

The earthworks strategy is to strip the topsoil for the works within the site and cut down to a natural bearing layer for the external siteworks and pavements. Where possible, the existing cut material is to be used on site (for the bunds etc), to reduce the volume of material that is required to be taken off-site.

Due to the overall strategy, and the site validation (contamination removal) undertaken by Eliot Sinclair, the effects of the earthworks are less than minor.

17. Proprietary Items

The following proprietary items are included in the construction of the building:

- + Precast concrete structures
- + Metalwork & castings
- + Stormwater treatment devices
- + Valving (isolation, sluice, back flow prevention, water meters)
- + Constantly monitored, automated contaminant systems
- + Pipework

18. Coordination Statement

Coordination with the following disciplines/services to be undertaken during the design phase of the project:

- + Architect
- + Landscape Architect
- + Geotechnical Engineer
- + Structural Engineer
- + Hydraulic Engineer
- + Mechanical Engineer
- + Geotechnical
- + Fire Protection Engineer

19. Safety in Design

The safety in design elements are to be considered further during the developed design phase, however will include, but not be limited to:

- + Accessibility
- + Heelsafe grates for the stormwater features
- + Construction methodology

20. Means of Compliance & Regulations

The design of the civil elements are in compliance with the standards of New Zealand Building Code (NZBC).

- + The stormwater disposal system has been designed in accordance with the New Zealand Building Code, Section E1.
- + The sewer disposal system has been designed in accordance with the New Zealand Standard AS/NZS 3500.2.2.
- + The water reticulation system to be designed in accordance with the New Zealand Building Code, Section G12.

All work is to comply in every respect with the Regulations and Bylaws of any and every Authority having jurisdiction over the installation at the location where the work is being carried out, including but not limited to:

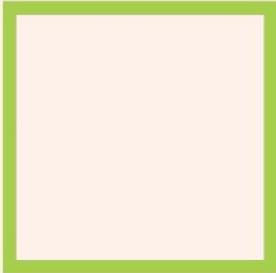
- + Building Act 2004 and amendments thereto
- + New Zealand Building Code AS/NZS 3500
- + Resource Management Act 1991
- + Health and Safety at Work Act 2015
- + Environment Canterbury Regional Council Erosion & Sediment Control Guidelines
- + Unless specified elsewhere, all works must comply with the Local Authority Construction Standard Specifications (CCC CSS).

21. Appendices

The following Appendices have been included for reference: Update

- + Appendix A - Civil Engineering Plans
- + Appendix B - Earthworks Plans
- + Appendix C - Erosion & Sediment Control Measures
- + Appendix D - Christchurch City Council Correspondence Regarding the Floor and Flood Levels

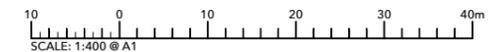
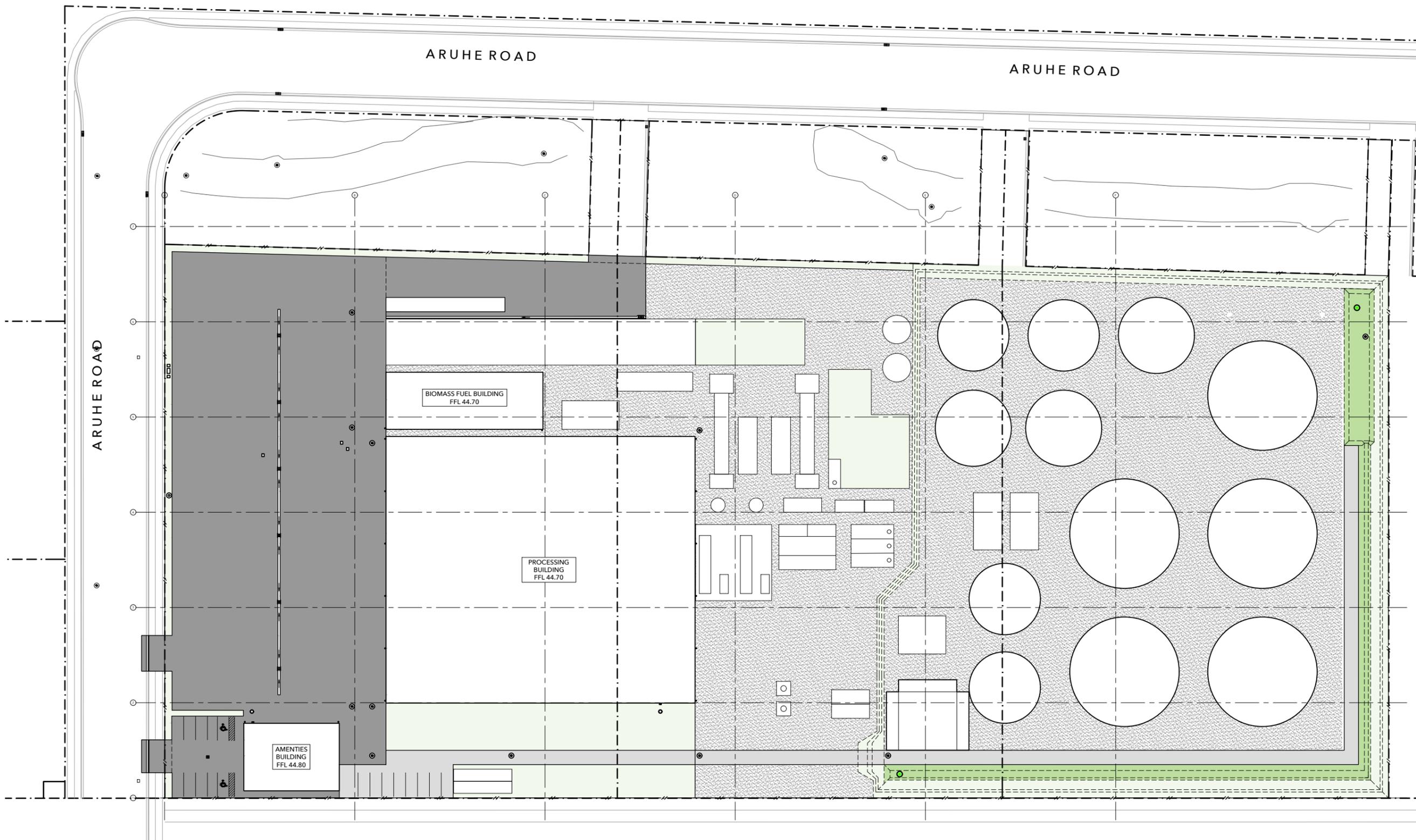
Appendix A. Civil Engineering Plans



ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD, CHRISTCHURCH
CIVIL DRAWINGS
RESOURCE CONSENT
REFERENCE 231202



**Powell
Fenwick**



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ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

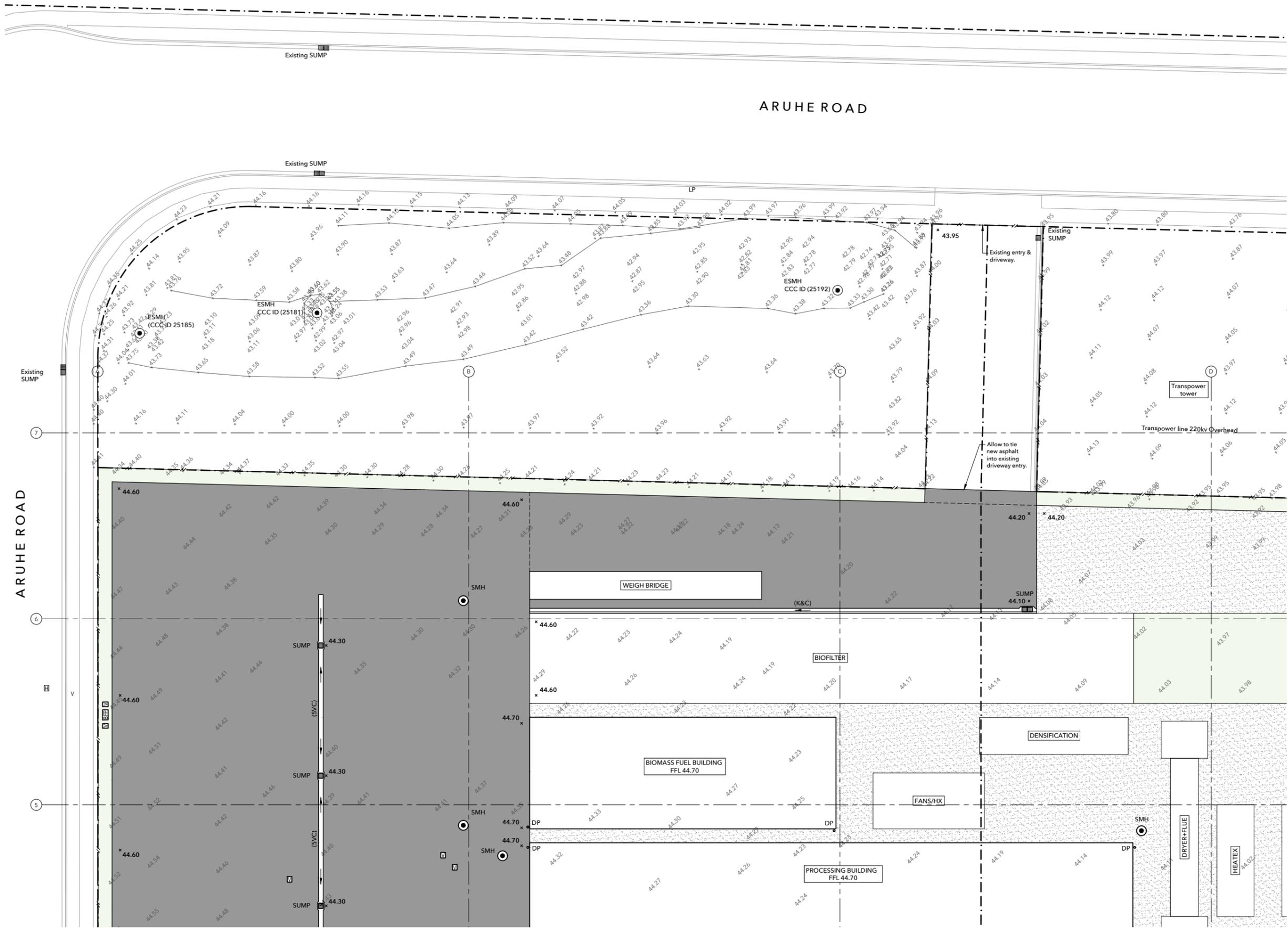
SITWORKS OVERVIEW

ISSUE	DATE	AMENDMENT
4	27.06.24	Resource Consent
3	30.05.24	Resource Consent
2	17.05.24	For Information
1	24.04.24	Resource Consent



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CHECKED	MRT				
REFERENCE					
231202- PF-CV - 00					

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ISSUE: 4
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 - Extg levels
 - x 26.60
 - New levels
 - New 35mm asphalt
 - New 60mm asphalt
 - New 150mm thick concrete
 - New 100mm thick concrete
 - New landscaped area
 - New grassed area
 - Chipseal area
 - SUMP New sump with CCC slotted grate
 - SUMP Existing sump with CCC slotted grate
 - (KO) New kerb only
 - (K&C) New kerb and flat channel
 - (SVC) New 500 wide v-channel
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - SMH New stormwater manhole
 - ESMH Existing stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
 - ORG New overflow relief gully
 - RP New rodding point
 - DP New down pipe
 - LP Extg light pole
 - New fence
 - Extg fire hydrant
 - Extg valve
 - New backflow preventer
 - New valve
 - LP Extg light pole

NOTES:

CCC CSS SD - Refers to Christchurch City Council Construction Standard Specifications Standard Detail.

It is a requirement that only CCC approved drainlayers are permitted to work within city street or road boundaries.

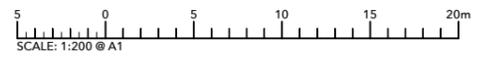
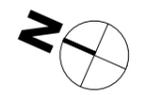
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The stormwater soakpits have been designed to NZBC E1 using a rainfall intensity of 28.60mm/hr and a duration of 60 minutes.

The sewer system has been designed to NZS/AS3500.

All joints against existing asphalt shall be spray banded and sealed on the completion of the works



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ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

SITWORKS

ISSUE	DATE	AMENDMENT
4	27.06.24	Resource Consent
3	30.05.24	Resource Consent
2	17.05.24	For Information
1	24.04.24	Resource Consent



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 - New 150mm thick concrete
 - New 100mm thick concrete
 - New landscaped area
 - New grassed area
 - Chipseal area
 - SUMP New sump with CCC slotted grate
 - SUMP Existing sump with CCC slotted grate
 - (KO) New kerb only
 - (K&C) New kerb and flat channel
 - (5VC) New 500 wide v-channel
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - SMH New stormwater manhole
 - ESMH Existing stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
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 - RP New rodding point
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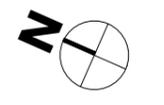
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17-21 ARUHE ROAD
CHRISTCHURCH

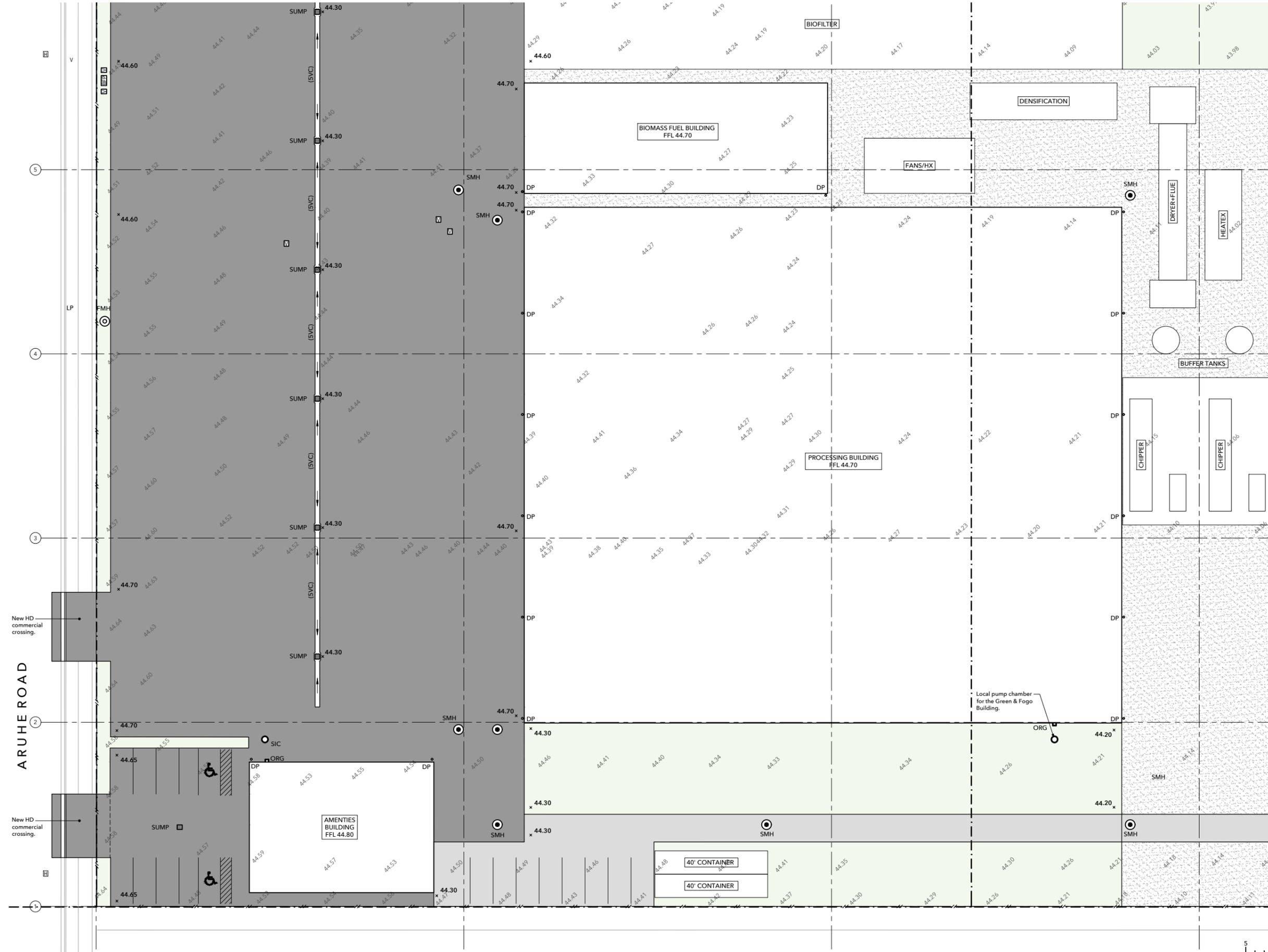
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1	24.04.24	Resource Consent



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 - New 60mm asphalt
 - New 150mm thick concrete
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 - New landscaped area
 - New grassed area
 - Chipseal area
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ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

SITWORKS

ISSUE	DATE	AMENDMENT
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2	17.05.24	For Information
1	24.04.24	Resource Consent



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 - New 100mm thick concrete
 - New landscaped area
 - New grassed area
 - Chipseal area
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 - (5VC) New 500 wide v-channel
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - SMH New stormwater manhole
 - ESMH Existing stormwater manhole
 - SMH New stormwater manhole with scrubby dome grate
 - ORG New overflow relief gully
 - RP New rodding point
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 - Extg fire hydrant
 - Extg valve
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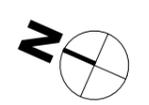
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ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

SITWORKS

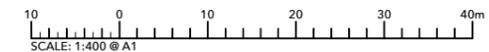
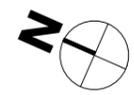
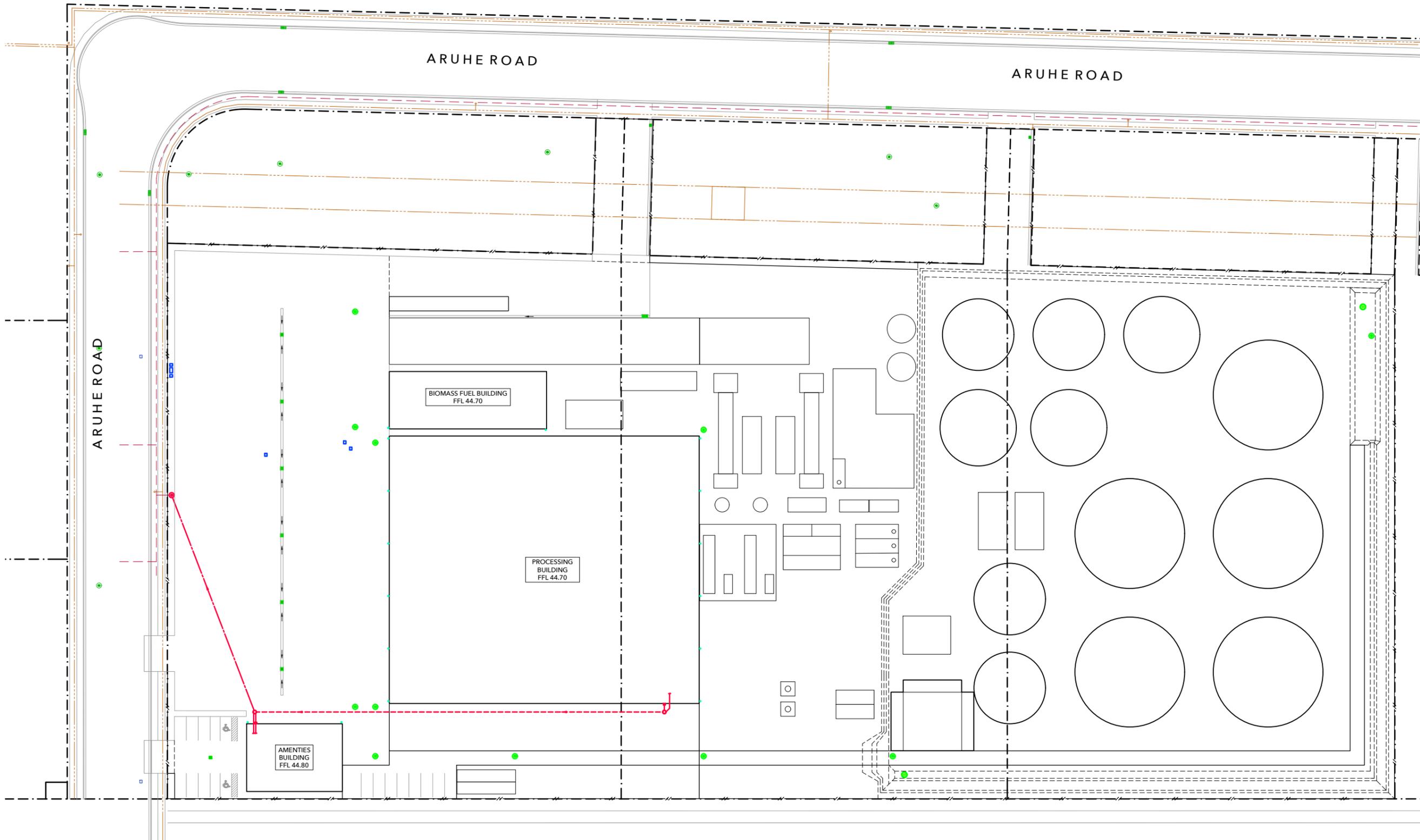
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2	17.05.24	For Information
1	24.04.24	Resource Consent



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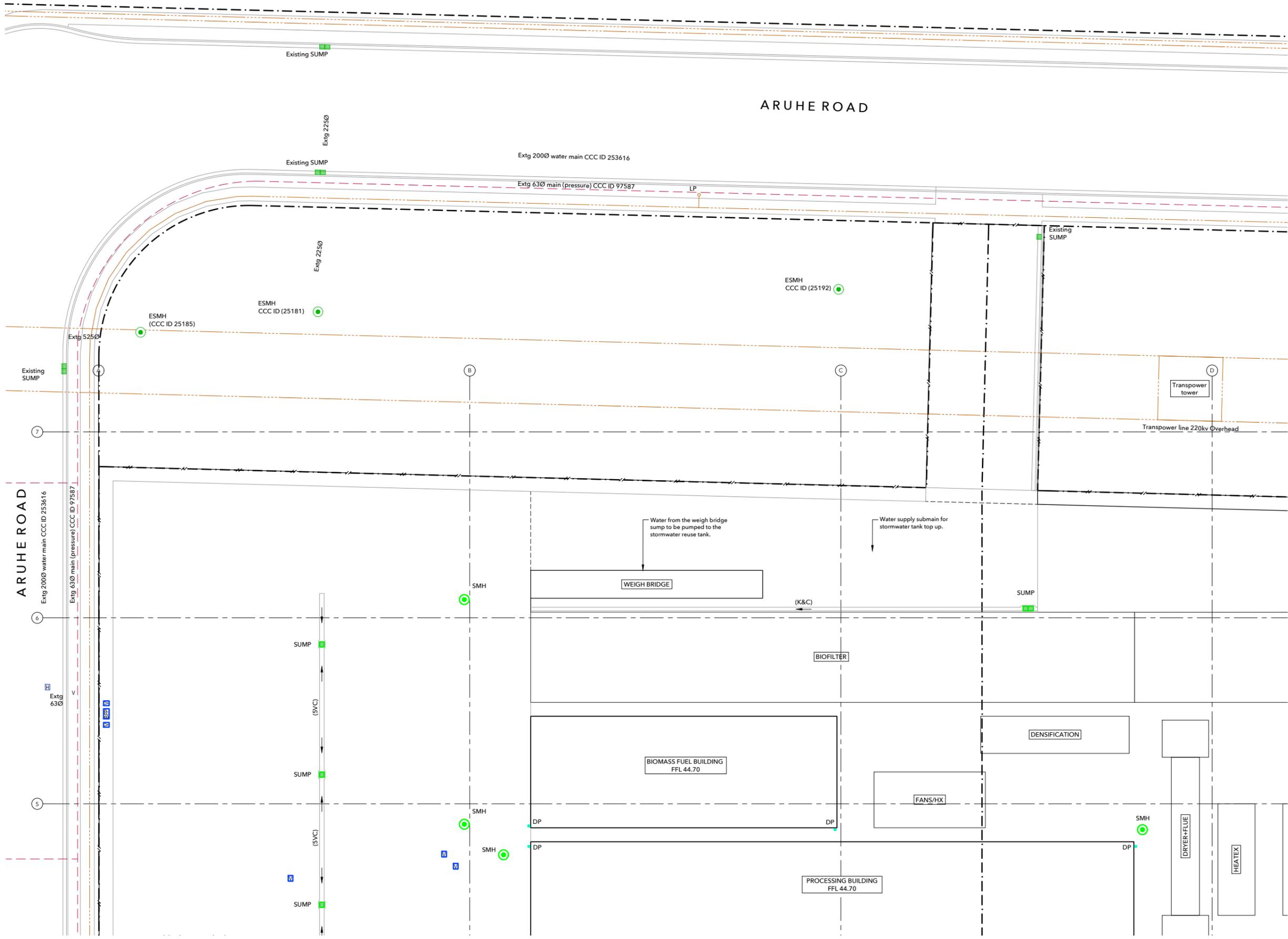
ECOGAS CHRISTCHURCH
 17-21 ARUHE ROAD
 CHRISTCHURCH

DRAINAGE OVERVIEW

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2	17.05.24	For Information
1	24.04.24	Resource Consent



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 - Extg foul sewer
 - Extg pumped foul sewer
 - New foul sewer
 - New pumped sewer
 - Extg stormwater
 - New stormwater
 - New roof stormwater
 - New Novafluo pipe
 - Extg water
 - New water
 - Extg power
 - New pumped line
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - ESMH Extg stormwater manhole
 - SMH New stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
 - ORG New overflow relief gully
 - DP New down pipe
 - LP Extg light pole
 - Extg fire hydrant
 - Extg valve
 - New backflow preventer
 - New valve
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ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

DRAINAGE

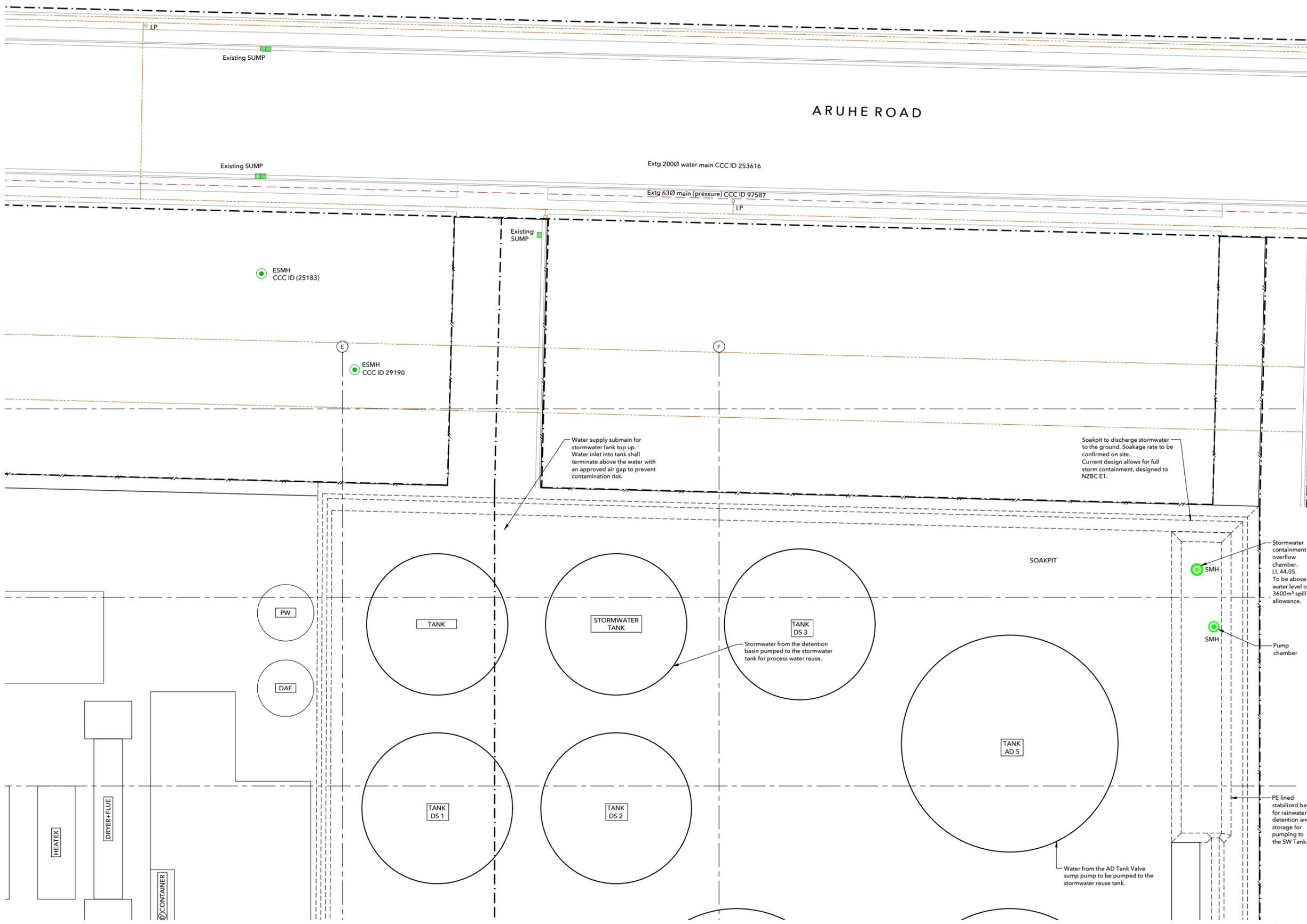
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1	24.04.24	Resource Consent



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 - New foul sewer
 - New pumped sewer
 - Extg stormwater
 - New stormwater
 - New roof stormwater
 - New Novaflo pipe
 - Extg water
 - New water
 - Extg power
 - New pumped line
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - ESMH Extg stormwater manhole
 - SMH New stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
 - ORG New overflow relief gully
 - DP New down pipe
 - LP Extg light pole
 - Extg fire hydrant
 - Extg valve
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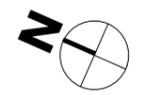
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6/27/2024 3:09:04 pm



ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

DRAINAGE

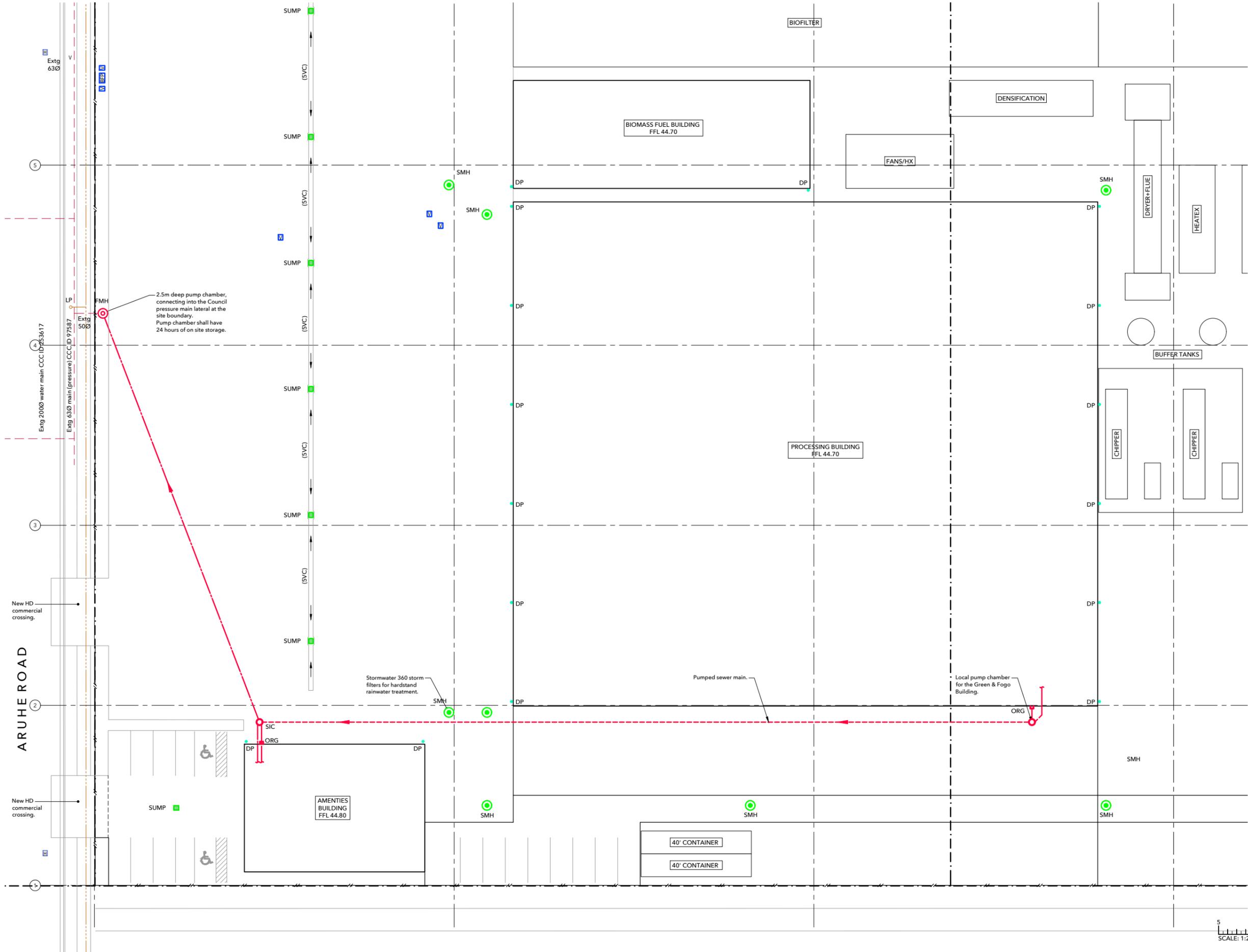
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1	24.04.24	Resource Consent



CIVIL

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231202 - PF-CV - 00 -SK22-00





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 - Extg foul sewer
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 - Extg stormwater
 - New stormwater
 - New roof stormwater
 - New Novaflo pipe
 - Extg water
 - New water
 - Extg power
 - New pumped line
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - ESMH Extg stormwater manhole
 - SMH New stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
 - ORG New overflow relief gully
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CCC CSS SD - Refers to Christchurch City Council Construction Standard Specifications Standard Detail.

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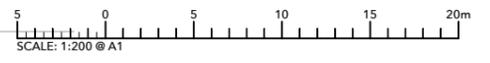
The Contractor is to confirm the invert levels of the relevant existing stormwater and sewer pipes prior to commencing work on site.

The stormwater pipework has been designed to NZBC E1 using a rainfall intensity of 61.6mm/hr and a duration of 10 minutes.

The stormwater soakpits have been designed to NZBC E1 using a rainfall intensity of 28.60mm/hr and a duration of 60 minutes.

The sewer system has been designed to NZS/AS3500.

All joints against existing asphalt shall be spray banded and sealed on the completion of the works



ORIGINAL DRAWING IN COLOUR

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 Powell Fenwick Consultants Limited trading as Powell Fenwick
 03 366 1777 www.pfc.co.nz Christchurch Queenstown
 6/27/2024 3:09:04 pm



ECOGAS CHRISTCHURCH
 17-21 ARUHE ROAD
 CHRISTCHURCH

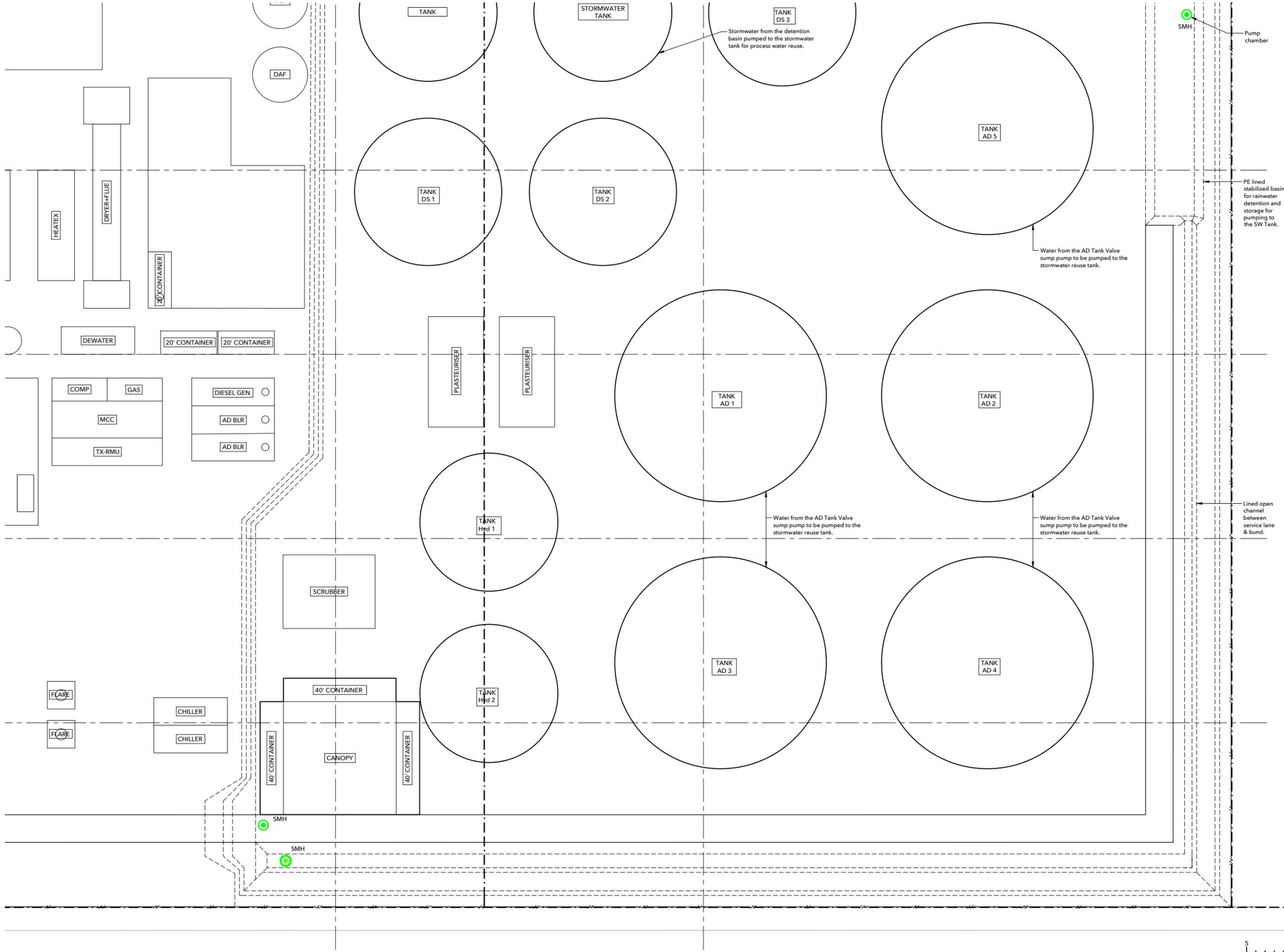
DRAINAGE

ISSUE	DATE	AMENDMENT
4	27.06.24	Resource Consent
3	30.05.24	Resource Consent
2	17.05.24	For Information
1	24.04.24	Resource Consent



CIVIL		SCALE AT A1	ISSUE
DESIGNED	BJP	1:200	4
DRAWN	MVZ		
CHECKED	MRT		
REFERENCE	DISCIPLINE	ZONE	SHEET
231202 - PF-CV - 00			SK23-00





- KEY**
- 1:200 @ A1
 - 1:400 @ A3
 - Approximate legal boundaries for information only
 - SUMP New sump with CCC slotted grate
 - SUMP Existing sump with CCC slotted grate
 - Extg foul sewer
 - Extg pumped foul sewer
 - New foul sewer
 - New pumped sewer
 - Extg stormwater
 - New stormwater
 - New roof stormwater
 - New Novaflo pipe
 - Extg water
 - New water
 - Extg power
 - New pumped line
 - FMH New foul sewer manhole
 - SIC New foul sewer inspection chamber
 - ESMH Extg stormwater manhole
 - SMH New stormwater manhole
 - SMH New stormwater manhole with scruffy dome grate
 - ORG New overflow relief gully
 - DP New down pipe
 - LP Extg light pole
 - Extg fire hydrant
 - Extg valve
 - New backflow preventer
 - New valve
 - LP Extg light pole

NOTES:

CCC CSS SD - Refers to Christchurch City Council Construction Standard Specifications Standard Detail.

It is a requirement that only CCC approved drainlayers are permitted to work within city street or road boundaries.

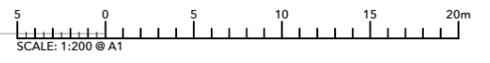
The Contractor is to confirm the invert levels of the relevant existing stormwater and sewer pipes prior to commencing work on site.

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The stormwater soakpits have been designed to NZBC E1 using a rainfall intensity of 28.60mm/hr and a duration of 60 minutes.

The sewer system has been designed to NZS/AS3500.

All joints against existing asphalt shall be spray banded and sealed on the completion of the works



ORIGINAL DRAWING IN COLOUR

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6/27/2024 3:09:05 pm



ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

DRAINAGE

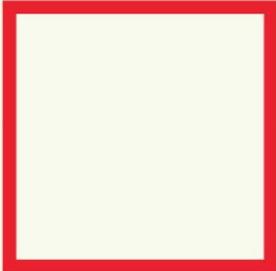
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4	27.06.24	Resource Consent
3	30.05.24	Resource Consent
2	17.05.24	For Information
1	24.04.24	Resource Consent



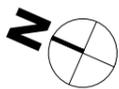
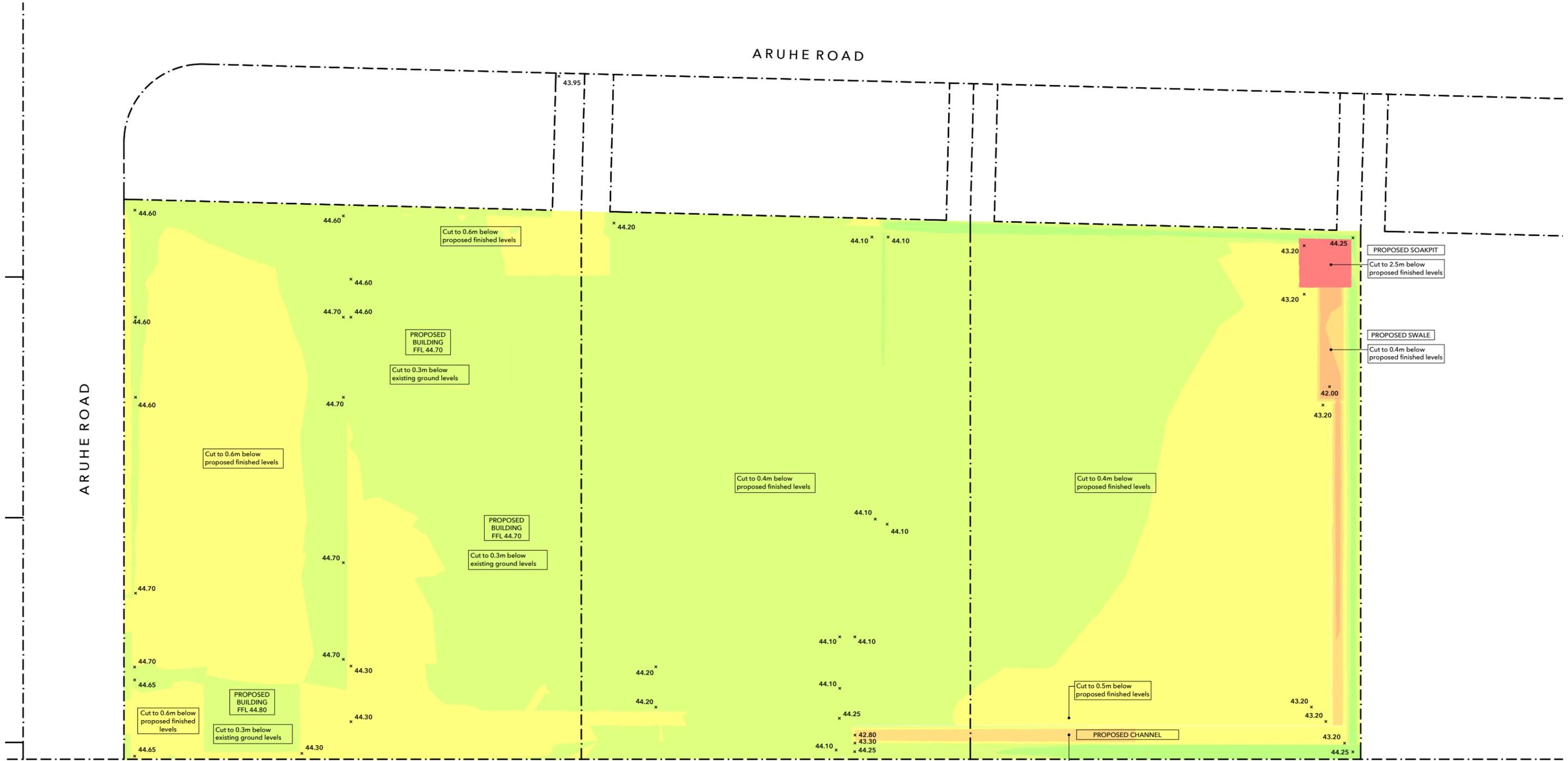
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	DRAWN	MVZ	1:200	4
	CHECKED	MRT		
REFERENCE	DISCIPLINE	ZONE	SHEET	LEVEL
231202 - PF-CV - 00			SK24	00



Appendix B. Earthworks Plans



ARUHE ROAD



KEY:

1:400 @ A1
1:800 @ A3

Approximate legal boundaries for information only

× 26.60 Proposed finished ground levels



BULK EARTHWORKS NOTES:

1. Approximate Bulk Cut Volume 13000m³ (to proposed finished ground levels shown)
2. These are solid volumes, with no allowance for waste material, consolidation, compaction or bulking.

CUT ANALYSIS

Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-3.000	-2.500
2	Dark Red	-2.500	-2.000
3	Orange	-2.000	-1.500
4	Light Orange	-1.500	-1.000
5	Yellow	-1.000	-0.500
6	Light Green	-0.500	0.000
7	Green	0.000	0.500

ORIGINAL DRAWING IN COLOUR

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Powell Fenwick Consultants Limited trading as Powell Fenwick
03 366 1777 www.pfc.co.nz Christchurch Queenstown
5/30/2024 4:59:09 pm



ECOGAS CHRISTCHURCH
17-21 ARUHE ROAD
CHRISTCHURCH

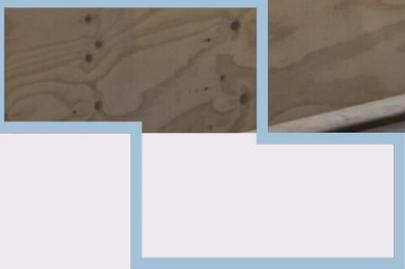
CUT HEAT MAP

ISSUE	DATE	AMENDMENT
3	30.05.24	Resource Consent
2	17.05.24	For Information
1	24.04.24	Resource Consent



CIVIL
DESIGNED BJP
DRAWN MVZ
CHECKED MRT
REFERENCE DISCIPLINE ZONE SHEET LEVEL
SCALE AT A1
1:400
ISSUE
3
ACENZ
231202 - PF-CV - 00 -SK31-00

Appendix C. Erosion & Sediment Control Specification



Ecogas Christchurch Organic Processing Facility

Erosion and Sediment Control Specification

Pioneer Energy



Issue Authorisation

Date	Issue	Description	Written By	Reviewed By
07/06/24	1	Resource Consent	BJP	

Written By:

Brenton Peart

Senior Civil Engineer

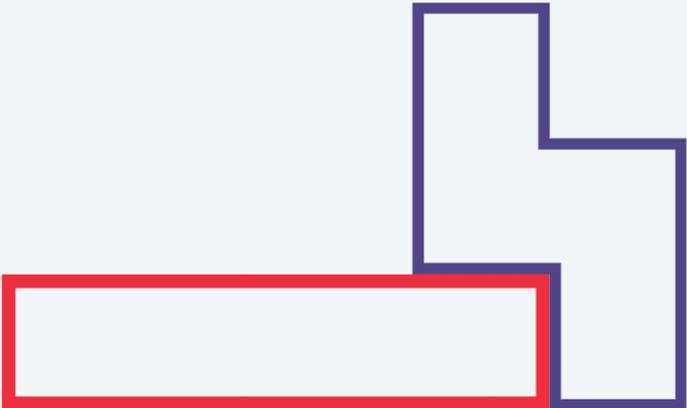
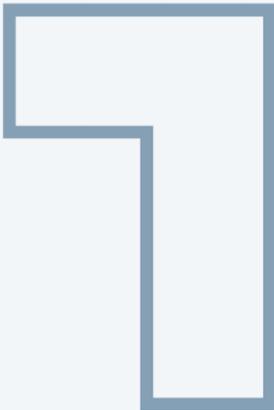
B.E Engineering Science (Civil)

This report is subject to Powell Fenwick Conditions of Engagement which among other conditions prohibits the on sale of the report, its use outside this project, and duplication in part only of the report.

The report has been prepared solely for the benefit of our client. No liability is accepted by this firm or by any principal, or director, or any servant or agent of this firm, in respect of its use by any other person. Any other person who relies upon any matter contained in this report does so entirely at their own risk.

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C.1.4 Erosion Control	8
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C.1.6 Chemical Spills/Contamination	9
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C.1 Erosion & Sediment Control

C.1.1 Conditions of Contract

Refer to the General Conditions and Preliminary Clauses of the project specification. These sections are equally binding on all trades. This section of the specification shall be read in conjunction with all other Trade Sections and all Contract Documents.

This Specification covers the precautions to be taken by the Contractor to control erosion and sediment effects and minimise related damage or environmental deterioration to the Works, surrounding the property, or receiving environment during the period of the Contract including the Defects Liability period and any longer period when required by the Contract Documents.

The Contractor shall supply all system design, plant, labour, materials and supervision necessary to ensure the satisfactory construction, operation and maintenance of the environmental protection systems throughout the contract period and beyond as necessary until the construction works and any drainage changes are stabilised to a standard where risk of adverse effects from the works on the surrounding environment are less than minor.

Where not specified, works shall comply with the relevant clauses of the Environment Canterbury Regional Council Erosion and Sediment Control Toolbox and Christchurch City Council Construction Standard Specifications (CCC CSS).

C.1.2 General

The Contractor shall take all the steps necessary to control the erosion and sediment runoff from the site for the duration of the construction works. No runoff water containing sediment or silt is allowed to flow across any boundary or into existing drains or streams. **No construction stage stormwater or sediment is allowed to enter any soakpit onsite.**

These steps shall include the staging of works to minimise the time and total area that the site is disturbed, time limits and methods of stabilisation. It shall also include details of perimeter controls and any sediment retaining structures, means of protection of waterways, prevention of vehicles spreading sediment outside the site, and the programme to maintain these measures.

The minimum perimeter controls that are acceptable are as follows:

- + Silt fence around downstream end(s) of site
- + Prevention of vehicles transporting sediment off site
- + Protection of all inlets, swales and sumps with an appropriate filter system
- + De-watering pumps discharging through silt fence or other filter media

Where not specified, works shall comply with the relevant clauses of the Christchurch City Council Construction Standard Specifications (CCC CSS), all local Regional Council guidelines and the methods detailed in the Auckland Council GD05.

The Contractor shall prepare an Erosion and Sediment Control Plan (E&SCP) with relevant calculations, sketches and drawings. If the Contractor proposes to use alternative measures to those detailed in this Specification, the Contractor shall submit to the Engineer full details, including calculations and sketches, of their proposed method for erosion and sediment control within the scope of the works. The proposed method must be designed by a suitably qualified person, and certified as suitable for this site. This must be completed before commencement of the site works or drainage works.

The Erosion and Sediment Control Plan (E&SCP) shall be submitted for approval a minimum of twenty working days prior to starting work to the Engineer and Local & Regional Authority for review. This is to be done in conjunction with any Construction Management Plan (CMP) the Contractor is required to complete as part of any Resource Consent compliance requirements. If the plan is insufficient or incorrect, it will be returned to the Contractor for amendment and re-submission. No work may commence on site prior to the Contractor's receipt of the approved plan.

The minimum requirements of the plan must be implemented throughout the duration of the works. Where it becomes necessary to implement measures extra to the minimum required by the approved plan, particularly in case of emergency, these shall be implemented immediately and the Engineer advised.

Where it becomes necessary to amend the plan, amendments shall be submitted to the Engineer for approval within 24 hours or earlier if the amendments are necessary to prevent sediment discharging to a waterway or stormwater system. No additional payment shall be made to the Contractor for changes required to the E&SCP.

If at any stage the Engineer is not satisfied with the implementation of Erosion and Sediment Control measures, or believes that the standard of the outcomes is compromised, the Contractor shall be advised and shall be required to implement improvements.

Where the requirements of this section are not met, the Engineer may:

- + Direct the Contractor to suspend work until the improvements are implemented.
- + Take whatever steps necessary to ensure satisfactory Erosion and Sediment Controls are provided, at no cost to the Principal.

All uncontrolled discharges shall be removed, repaired and reinstated at no charge to the Principal and in accordance with all affected parties' requirements.

A copy of the most recent E&SCP must be held onsite at all times.

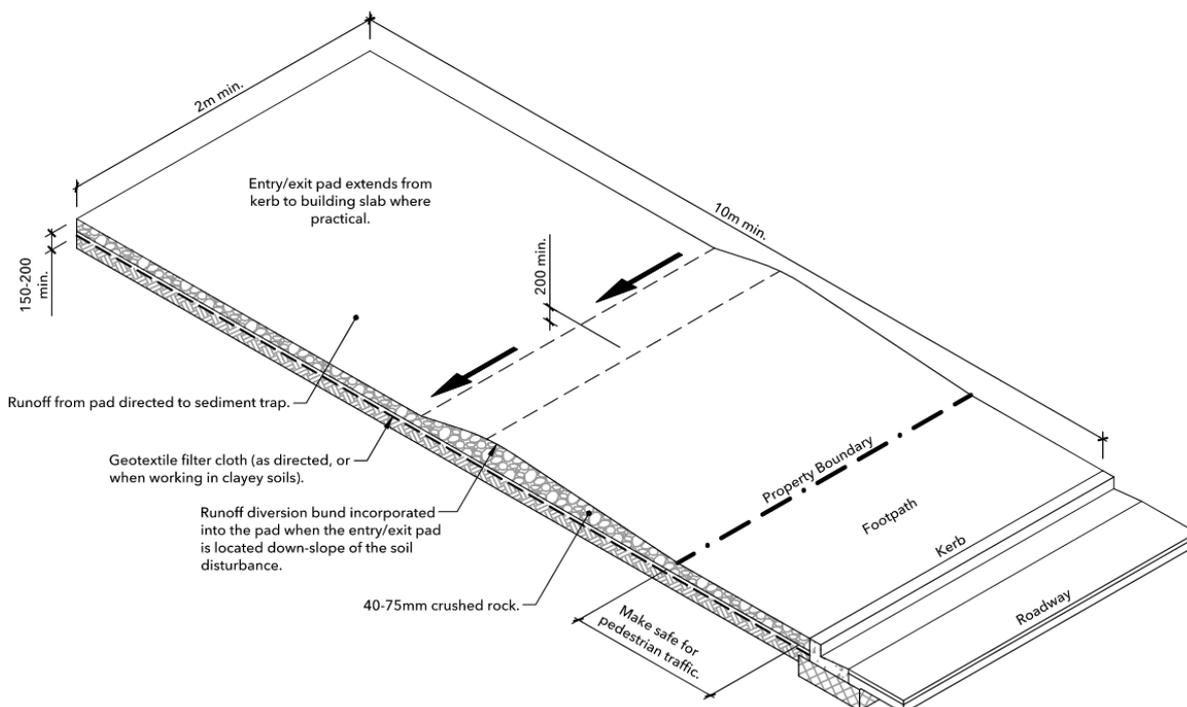
It is the responsibility of the Contractor to inform and induct all Sub-Contractor's onto site in respect to their duties/responsibilities regarding the E&SCP.

C.1.3 Sediment Control

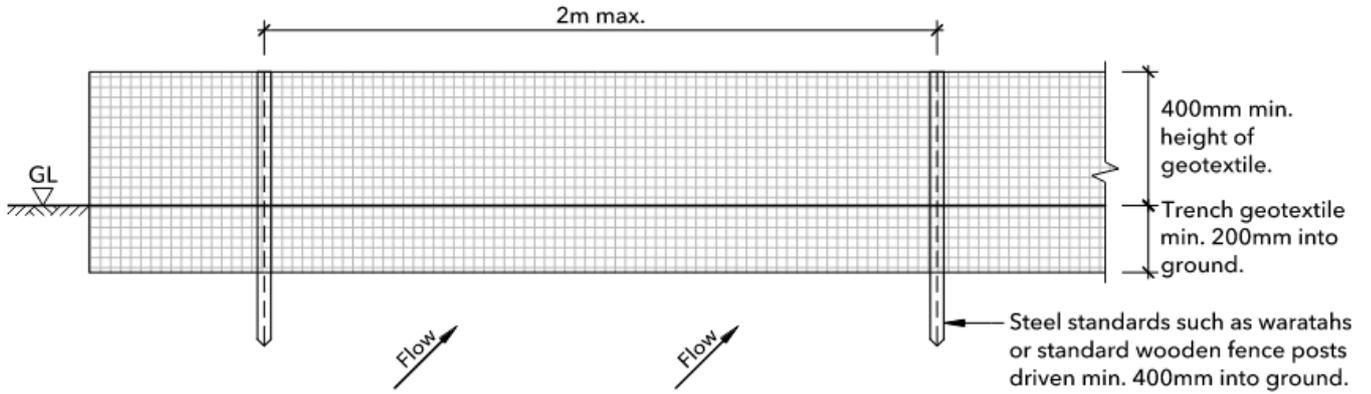
Sediment control at the lower end of the carriageway and site, within the site boundary, may be achieved by constructing one (or a combination) of the following methods:

C.1.3.1 Sediment Control in Sheet Flows

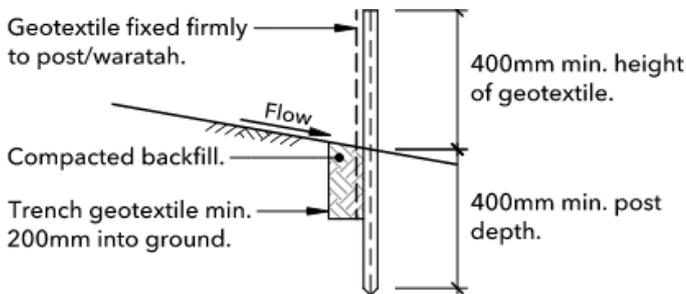
- + Vegetative buffer zones - Small strips of vegetation or turf may be retained at appropriate locations able to remove small volumes of sediment before it enters the stormwater system or leaves project boundary.
- + Straw bale barriers - Lines of straw bale barriers can be placed along contours to trap coarse sediment flows.
- + Site exit points - A number of methods such as shakers, exit ramps and rock aprons exist to help prevent vehicles transferring sediment outside the project boundary.



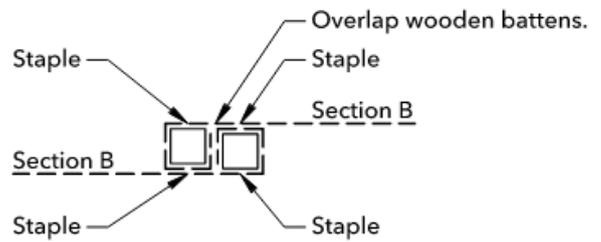
- + Sediment fences - Temporary barriers of woven geotextile fabric are capable of capturing medium to coarse sediment while also slowing the flow.



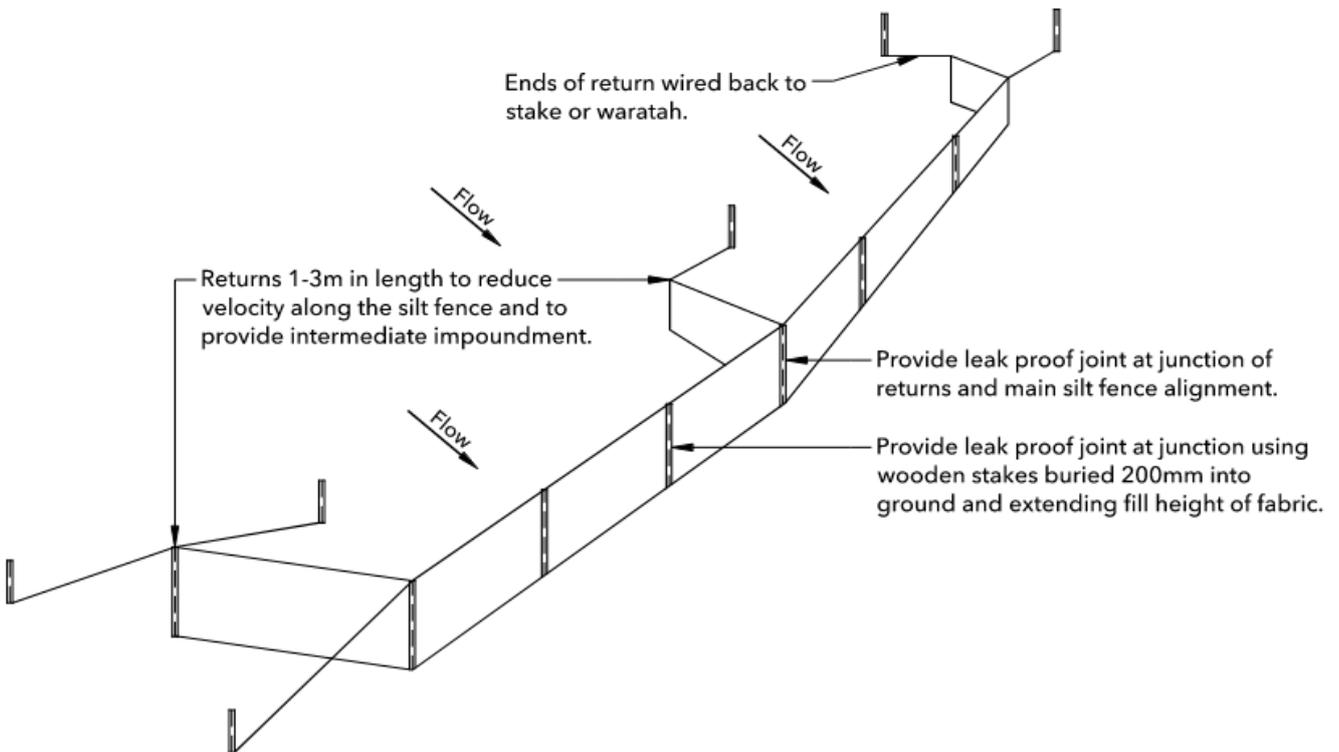
ELEVATION



CROSS SECTION



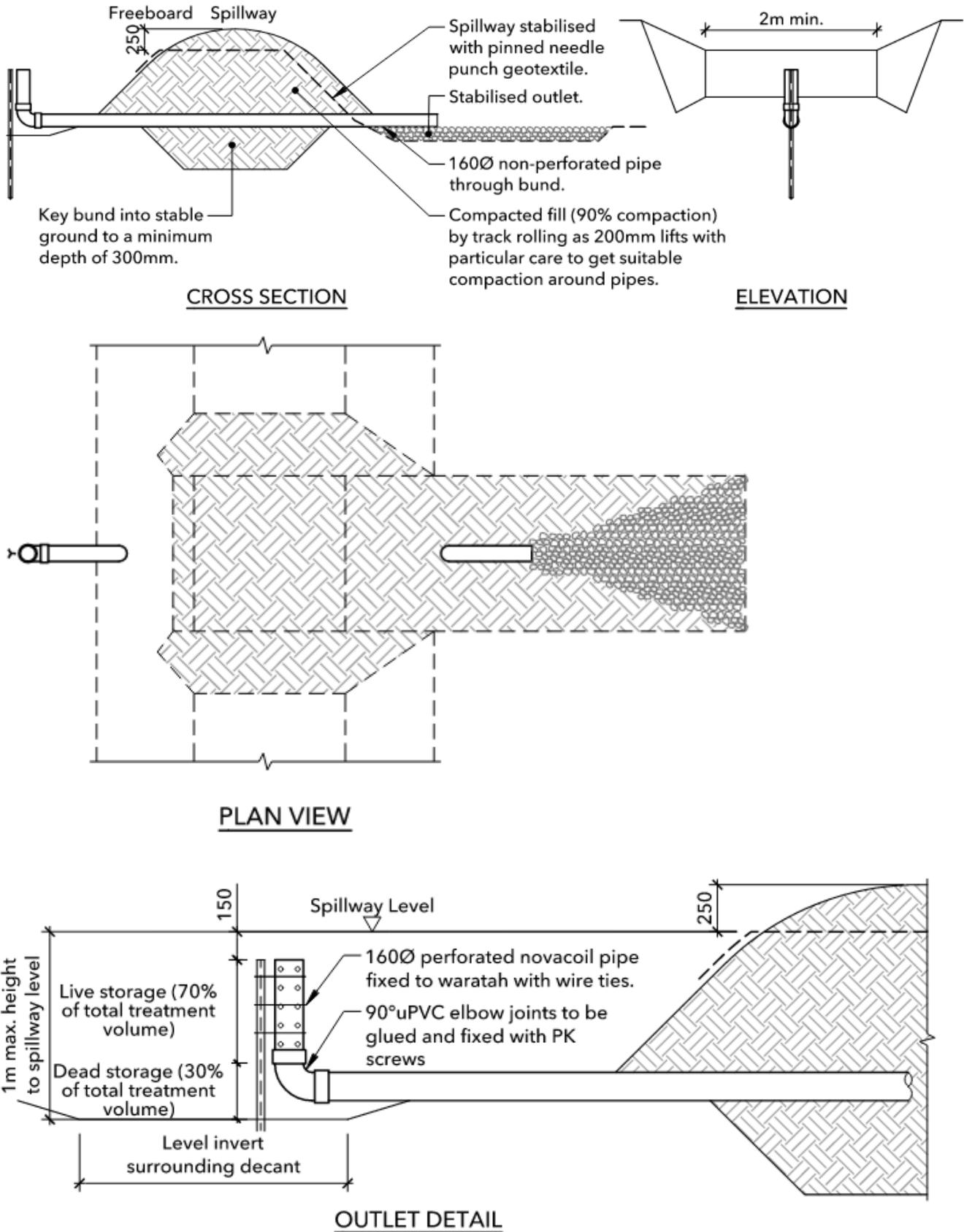
STANDARD FABRIC JOINT



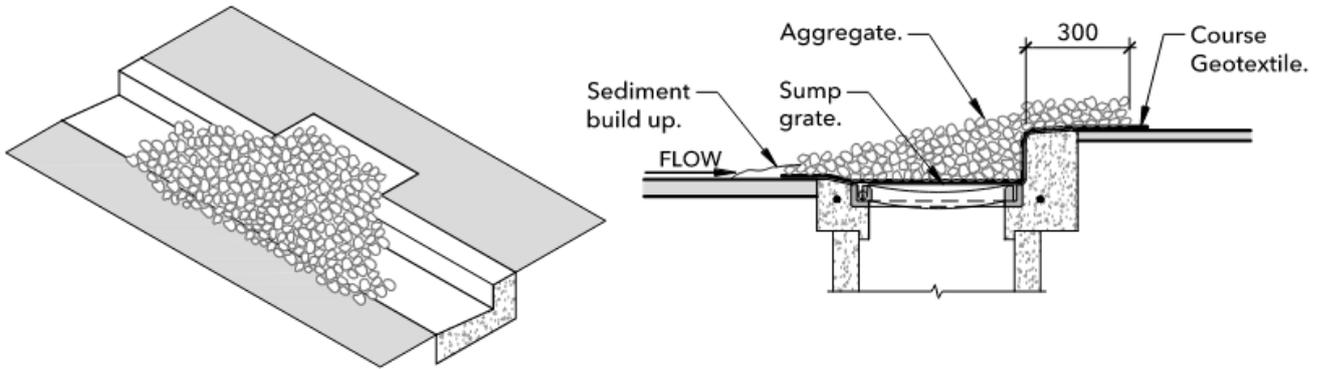
PERSPECTIVE VIEW

C.1.3.2 Sediment Control in Concentrated Flows

- + Sediment retention ponds - A temporary retention pond can be constructed using embankments or excavated with the purpose of detaining surface water and allowing sediment to settle out. Retention ponds can be designed to filter out a large range of sediment size.
- + Decanting earth bunds - Similar to retention ponds earth bunds can be construction using compacted natural soil, typical for smaller catchment areas they only filter out coarse sediment.

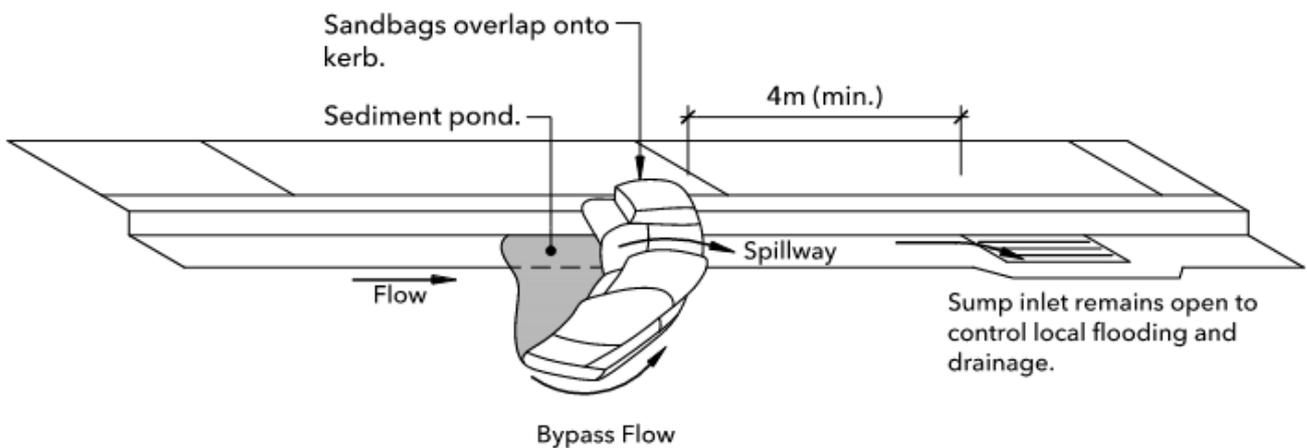


- + Dewatering - Maintaining sediment-laden water onsite for as long as possible and minimising volumes of water to be dewatered will help reduce the concentration of sediment in the discharged water.
- + Soakage systems - Using soakage pits where a permeable ground allows helps retain sediments within the project boundary.
- + Stormwater inlet protection - Covering stormwater inlets with Bidim A29 geotextile fabric and coarse aggregate. Silt and sediment can be eliminated from entering stormwater openings by installing a temporary catchpit filter. The diagram below shows the suggested minimum requirements for inlet protection.



ISOMETRIC

CROSS SECTION



C.1.4 Erosion Control

Erosion control at the lower end of the carriageway and site, within the site boundary, may be achieved by constructing one (or a combination) of the following methods:

C.1.4.1 Surface Protection from Wind

- + Watering for dust control - Any disturbed soil particles will be sprayed with water to reduce their susceptibility to wind and dust erosion.
- + Surface cover - Covering with vegetation, mulch or geotextile will help prevent wind and dust erosion.

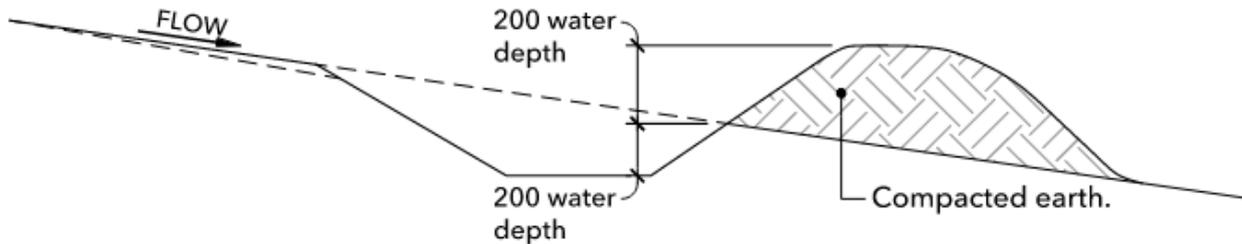
C.1.4.2 Surface Protection from Raindrop Impact and Sheet Flows

- + Prevent raindrop impact and reduce runoff flows.
- + Surface mulching - Where grassing is not possible a surface mulch such as hay, straw or wood chip is to be used.
- + Batter blankets - Placing a proprietary Bidim SC04 Filter Roll or similar approved alternative pegged along the ground contours will help protect from erosive forces.

- + Surface Roughing – Earthmovers equipped with ripper tyres create a rough surface to slow runoff speeds and promote infiltration.
- + Soil binders and chemical treatment – Binders and chemicals can be used to create a cohesive surface onto of the soil, apply as per manufacturer’s directions.

C.1.4.3 Waste Management – Concentrated Water Flows

- + Perimeter diversion measures – Constructed from small barriers of compacted earth which can be lined with geotextile these channels divert clean or silt-laden stormwater away from work areas.



- + Mid-slope runoff diversion measures (contour drains) – When rain is imminent the contractor shall use strategically place diversion channels to break up the catchment size.
- + Flumes - Where an unstabilised slope is steeper than 3:1 a flume shall be used to prevent scour of the slope.
- + Check dams – Typically constructed from sandbags or coarse aggregate, check dams are used to slow flow velocity to prevent scour.
- + Armour channel lining systems – Channels can be lined grass, geotextile or rock to prevent against channel scour and erosion.

C.1.5 Dust Nuisance

The Contractor shall take all reasonable precautions to mitigate the dust nuisance to the site, adjacent property and the public. Dust nuisance is deemed to be any visible air borne dust particles that are transported across the site boundaries or work area. Control of the dust is to include all of the Contract works, material stockpiled on site, and during operations e.g. excavations. Control of the dust must be maintained for the duration of the Contract.

Reasonable precautions must include the following minimum requirements:

- + Provision to dampen any excavated surface.
- + Provision to dampen any loaded vehicle to minimise material blowing off vehicles during transit.

No sediment, dust or waste material may be deposited on footpaths, roads or any public property from works on this site. Preventative measures must be taken to ensure loads on vehicles are secure, dust is suppressed and sediment from vehicle tyres is removed.

Accumulated dust and debris is to be removed from site to minimise the potential for dust nuisance.

C.1.6 Chemical Spills/Contamination

The contractor is to take measures to ensure machinery, storage tanks and other equipment containing chemicals such as diesel and oil not contaminate the surrounding environment. Such measures as recommended by the Environmental Protection Agency include:

- + Dry break couplings to minimise drips
- + Over-fill prevention devices
- + Catch trays under connection points
- + Spill kits available and instruction on how to use
- + Padlocks on valves

- + Staff training to include spill response

In addition, static storage tanks and parking sites for the mobile tanks will have:

- + Bunded perimeter to contain any spills
- + Regular inspection of each site and records of inspections

All chemical use is to comply with the Hazardous Substances and New Organisms Act 1996.

C.1.7 Inspection & Maintenance

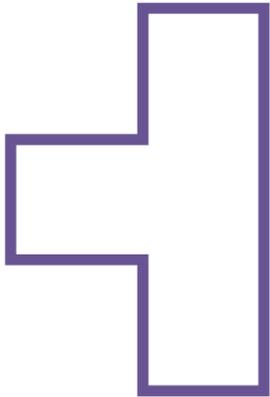
Regular inspection and maintenance must be carried out to ensure these temporary sediment/silt traps are not completely clogged by sediment or silt. Sediment and silt collected at the traps must be regularly removed to ensure no spillover.

Particular care must be taken to ensure that the discharges into the pump chambers are maintained to ensure they do not receive contaminated water.

Arrangements must be made for inspections and maintenance of the sediment/silt traps over weekends, during public holidays, over any extended periods when no work is being carried out, and when heavy rain occurs outside normal working hours.

C.1.8 Environment or Property Damage

Where environmental or property damage occurs to any party as a result of works being undertaken or not undertaken by the Contractor such damage shall be repaired by the Contractor to the satisfaction of the property owner or authority involved, without additional payment. Any fines due to negligence shall be entirely borne by the Contractor.



Appendix D.
Christchurch City Council
Correspondence Regarding the
Floor and Flood Levels



Brenton Peart

From: FloorLevels <FloorLevels@ccc.govt.nz>
Sent: Wednesday, 27 December 2023 1:00 pm
To: Brenton Peart
Subject: 17-21 Aruhe Road - Floor Levels - 27/12/2023

You don't often get email from floorlevels@ccc.govt.nz. [Learn why this is important](#)

Kia Ora Brenton.

Please find below a finished floor level (FFL) and flood assessment for 7 to 21 Aruhe Road.

Finished Floor Levels Requirements

NZ Building Code:

Minimum finished floor level required for compliance with Clause E1 of the New Zealand Building Code based on providing protection from a 1 in 50 year flood event with sea level rise allowance(0.45m or 0.5m) and 400 mm freeboard. This level may not be required for all structures and is for building code performance purposes only. Where a specific level is not required, compliance with the building code can be established using the solutions in E1/AS1.

The FFL requirement is currently: **No specific FFL is required.**

Please contact DutyBCO@ccc.govt.nz for more information.

Christchurch District Plan:

Property or parts of it in District Plan Flood Management Area: **No**
Property or parts of it in District Plan Fixed Minimum Floor Level Overlay: **No**

Predicted Flood Levels

Predicted **1 in 50 year** water level: **No flooding predicted.**

This is the predicted maximum water level in a 1 in 50 year flood event. The prediction allows for sea level rise(0.45m or 0.5m) and an increase in rainfall intensities as a result of climate change. This level is based on the current flood hazard information and may be updated once new data becomes available.

Predicted **1 in 200 year** water level: **No flooding predicted.**

This is the predicted maximum water level in a 1 in 200 year flood event. The prediction allows for 1.0 m sea level rise and an increase in rainfall intensities as a result of climate change. This level is based on the current flood hazard information and may be updated once new data becomes available.

Disclaimer

- i. All levels are provided in Christchurch Drainage Datum.
- ii. Please note that any Flood Level estimate(s) may differ from observed levels in previous or future events.
- iii. The FFL assessment is for flood limitation purposes only, and does not include consideration for other building consent aspects such as on-site drainage or service connections.

- iv. Any consent application lodged for this site will be assessed based on the most recent flood modelling information available at the time of lodgement, and the above level is subject to change if the flood modelling information for this area is updated.
- v. The content of this email does not constitute a 'Minimum Floor Level Certificate' as defined in the District Plan (Rule 5.4.1.2). To request one, follow the instructions at (<https://ccc.govt.nz/assets/Documents/Consents-and-Licences/resource-consents/Forms/P-022-Request-for-District-Plan-certification-Minimum-floor-level-PDF4.pdf>).

If you have any further floor level queries, contact the team at: FloorLevels@ccc.govt.nz.

For floor levels online, go to (<https://ccc.govt.nz/services/stormwater-and-drainage/flooding/floorlevelmap/>).

Ngā mihi,

Jig Dhakal

Assistant Engineer

Asset Planning - Stormwater & Waterways
(she/her)

03 941 5426

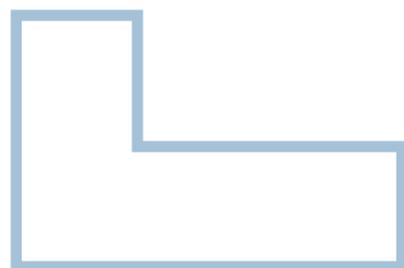
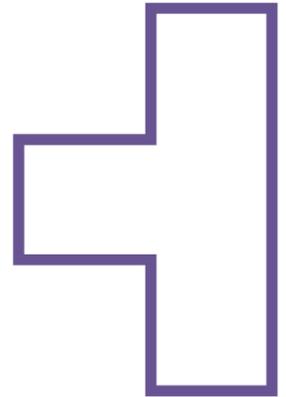
Jigyasa.Dhakal@ccc.govt.nz

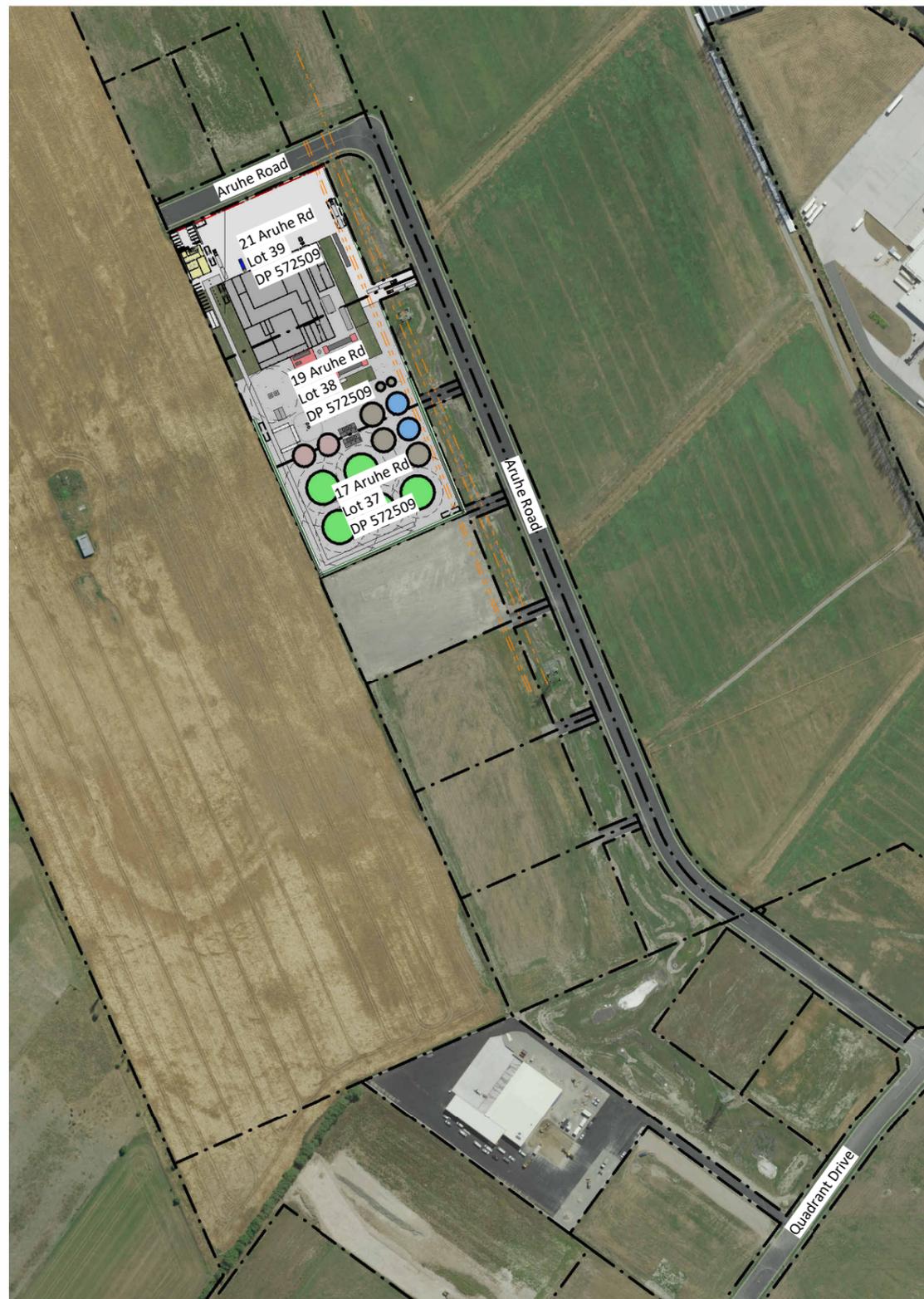
Te Hononga Civic Offices, 53 Hereford Street, Christchurch

PO Box 73014, Christchurch 8154

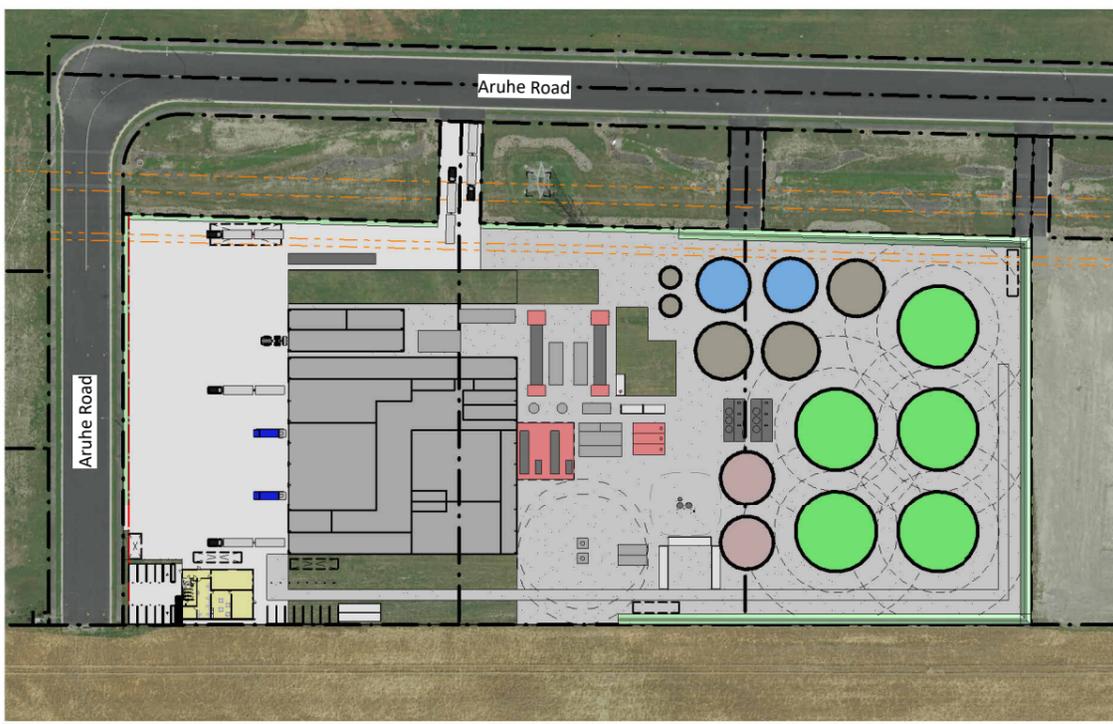
ccc.govt.nz

Christchurch
City Council 





1 OVERALL SITE PLAN - TRUE NORTH
1 : 2000@A1



2 OVERALL SITE PLAN - PROJECT NORTH
1 : 1000@A1

SITE ADDRESS:
21, 19, & 17 Aruhe Road, Islington,
CHRISTCHURCH

LEGAL DESCRIPTION:
Lot 39 DP 572509
Lot 38 DP 572509
Lot 37 DP 572509

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27/06/2024 4:19:18 pm



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2	RESOURCE CONSENT UPDATE	CAW	RB	13.05.24
1	RESOURCE CONSENT	CAW	RB	18.03.24
Issue / Details		By	Chkd	Date

stilesandhooker
ENGINEERING + ARCHITECTURE
07 839 1254 | admin@sandh.co.nz
s-h.co.nz
Level 1, 214 Collingwood Street | PO Box 718
Hamilton 3204 | Hamilton 3240
TELARC REGISTERED SUPPLIER ISO 9001

Client
Pioneer energy

Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

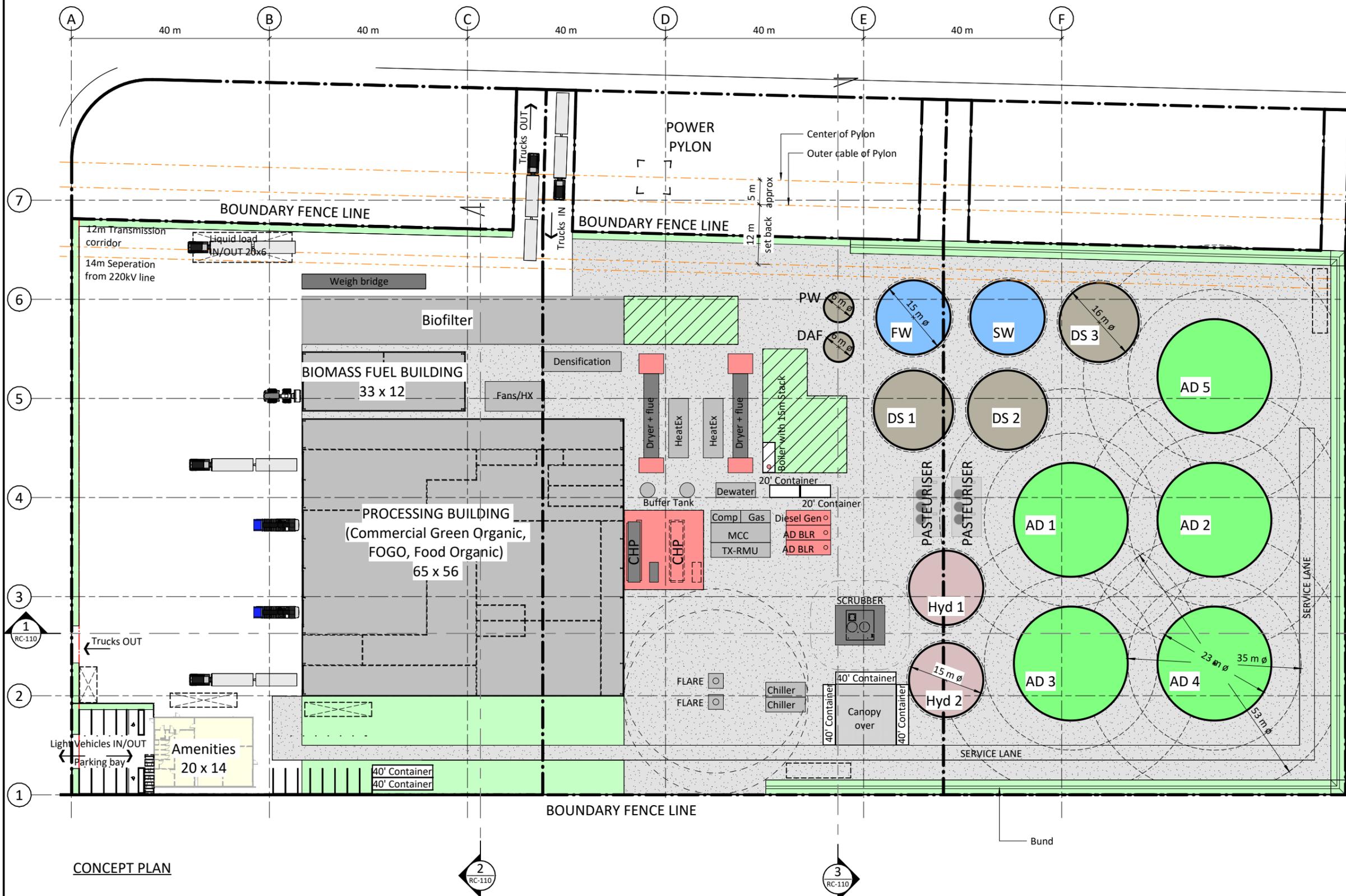
Drawing Title
SITE PLAN

Designed	Scale	Drawn
RB	As indicated	CAW
Project Start Date	Original Size	
FEBRUARY 2024	A1	

Job No	Drawing No	Issue
23-111	RC-100	3

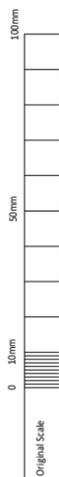
RESOURCE CONSENT
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE

ARCHITECTURAL



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27/06/2024 4:19:21 pm



CONCEPT PLAN

3	RESOURCE CONSENT UPDATE	CAW	RB	27.06.24
2	RESOURCE CONSENT UPDATE	CAW	RB	13.05.24
1	RESOURCE CONSENT	CAW	RB	18.03.24

stilesandhooker
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Client
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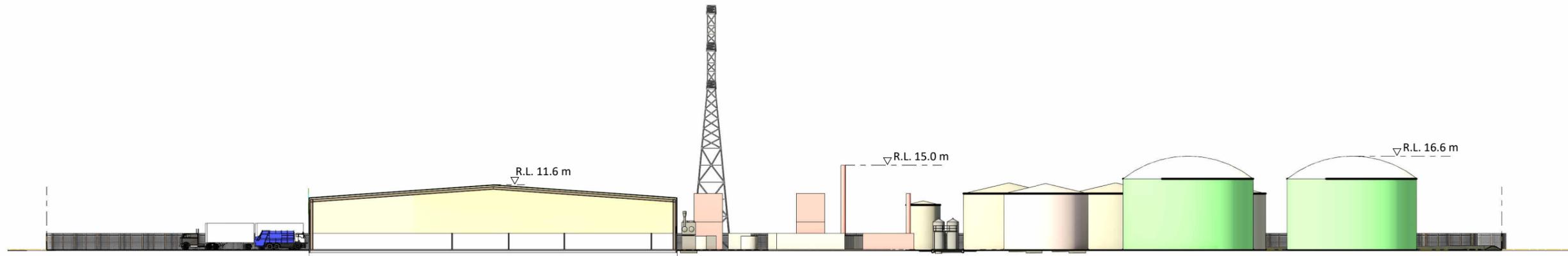
Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
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Job No	23-111	Drawing No	RC-101	Issue	3

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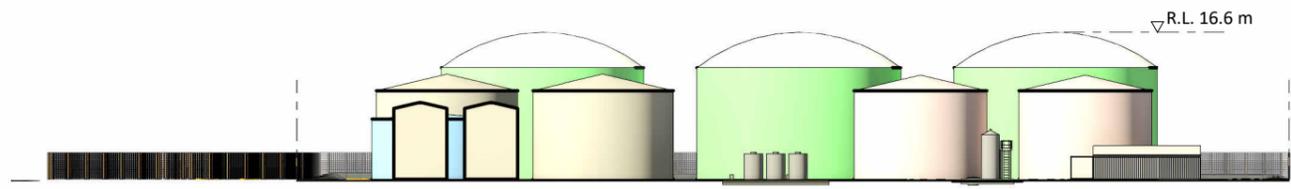
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2 OVERALL SECTION
RC-101 1:400@A1



3 OVERALL SECTION
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1	RESOURCE CONSENT	CAW	RB	18.03.24
Issue / Details		By	Chkd	Date

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Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
SITE SECTIONS

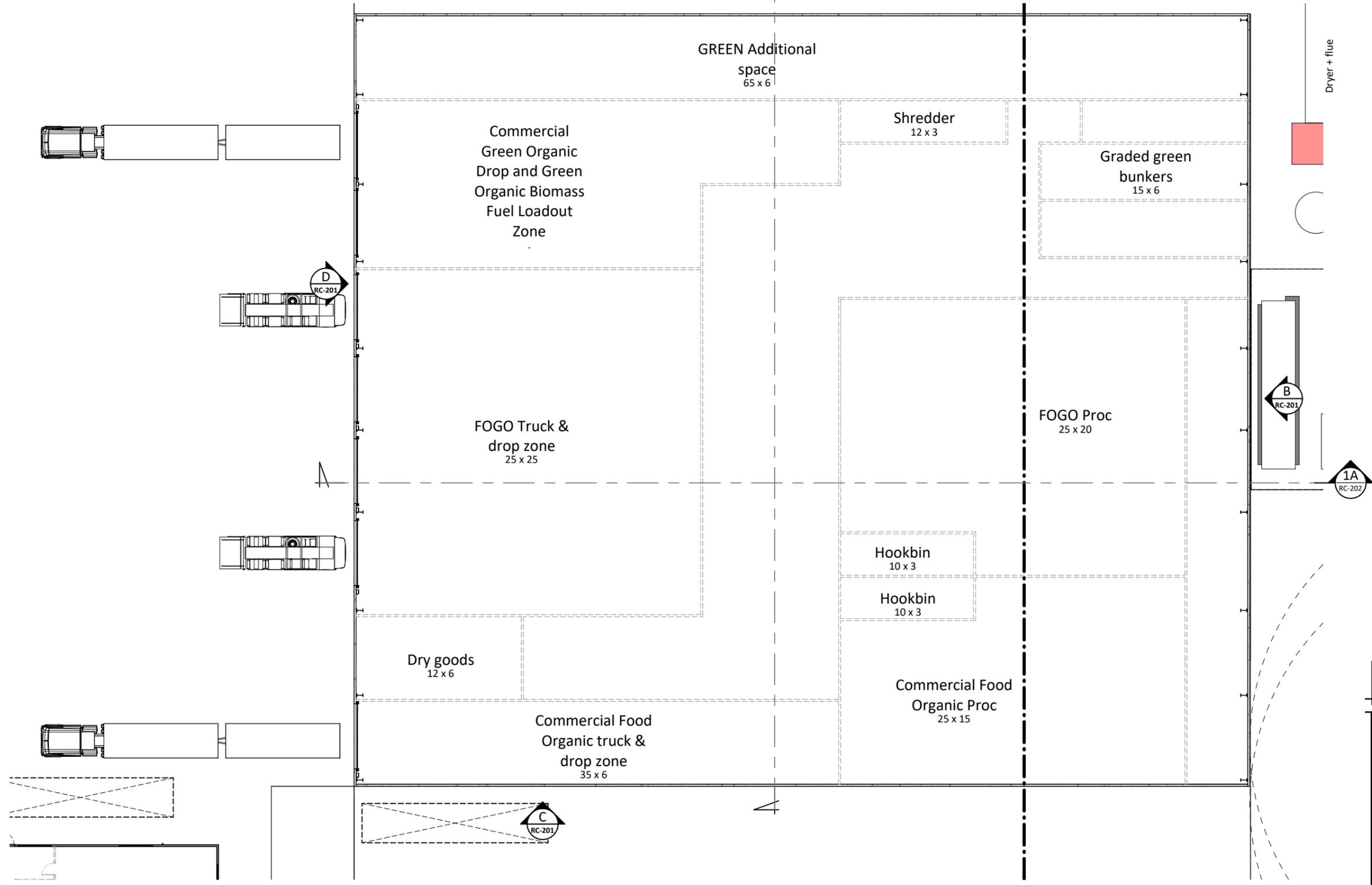
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RESOURCE CONSENT
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE

ARCHITECTURAL



A RC-201
1B RC-202



Dryer + flue

Commercial Green Organic Drop and Green Organic Biomass Fuel Loadout Zone

Shredder 12 x 3

Graded green bunkers 15 x 6

FOGO Truck & drop zone 25 x 25

FOGO Proc 25 x 20

Dry goods 12 x 6

Hookbin 10 x 3

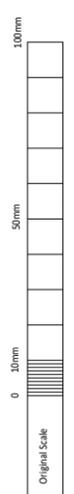
Hookbin 10 x 3

Commercial Food Organic truck & drop zone 35 x 6

Commercial Food Organic Proc 25 x 15

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Issue Details		By	Chkd	Date

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Client
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

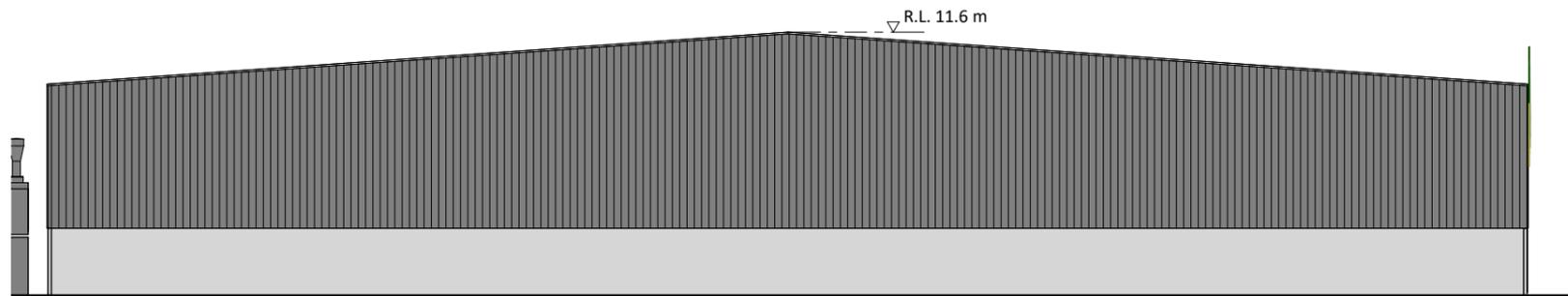
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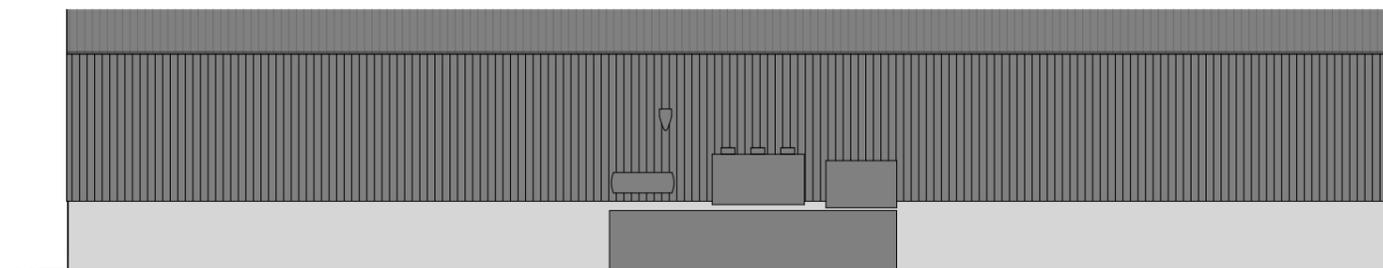
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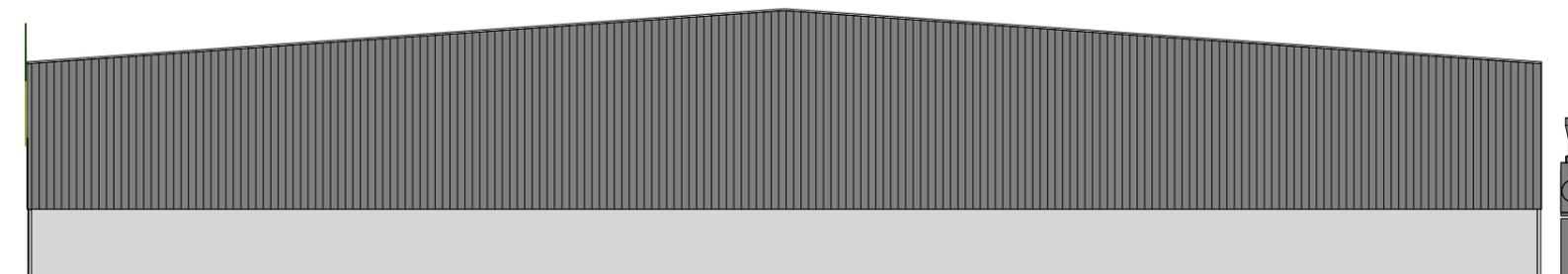
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RC-200 1:150@A1



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RC-200 1:150@A1



C PROCESSING BUILDING ELEVATION SOUTH WEST
RC-200 1:150@A1



D PROCESSING BUILDING ELEVATION NORTH WEST
RC-200 1:150@A1

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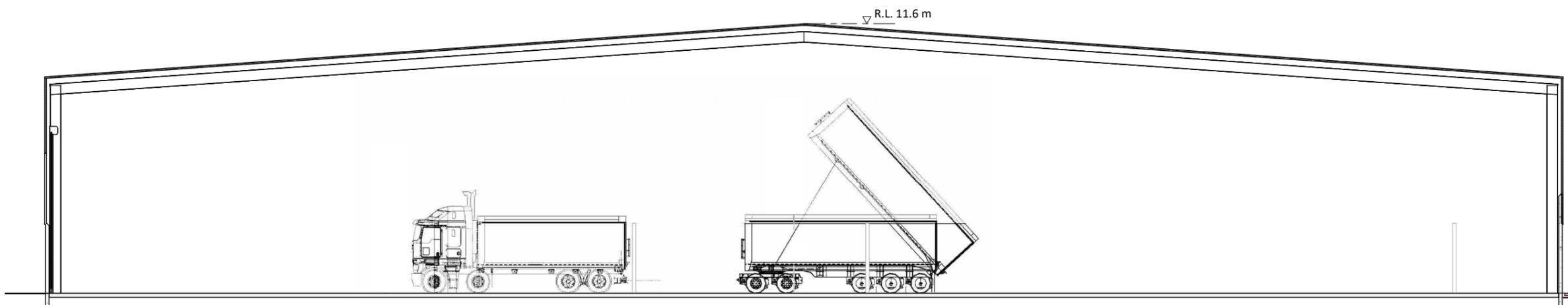
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Client
Pioneer energy

Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
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Job No	Drawing No	Issue
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1B PROCESSING BUILDING SECTION
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1	RESOURCE CONSENT	CAW	RB	18.03.24

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Client
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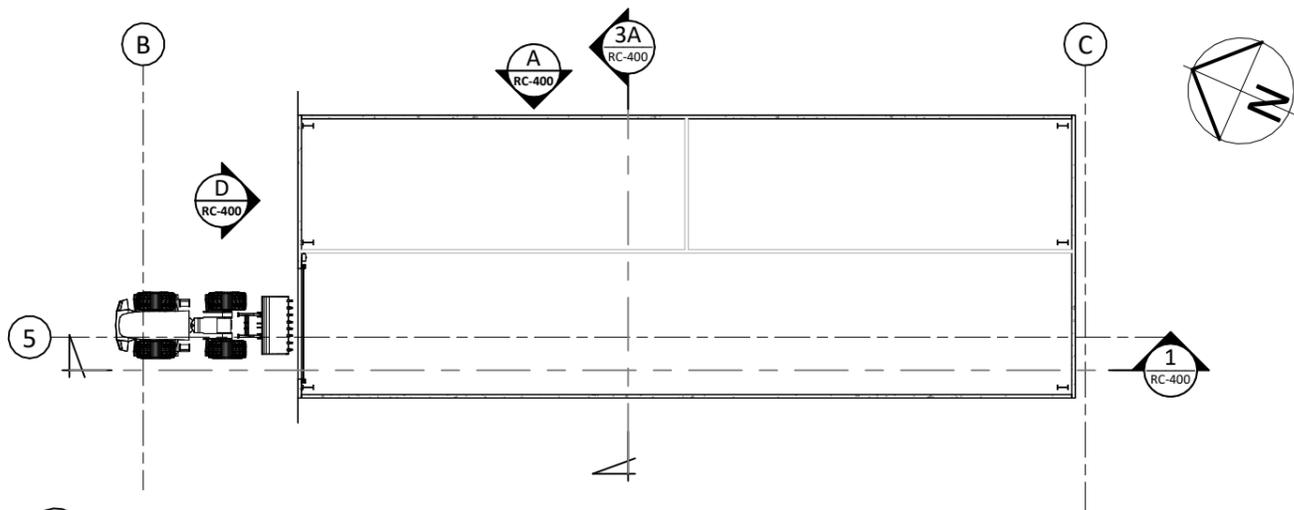
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ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
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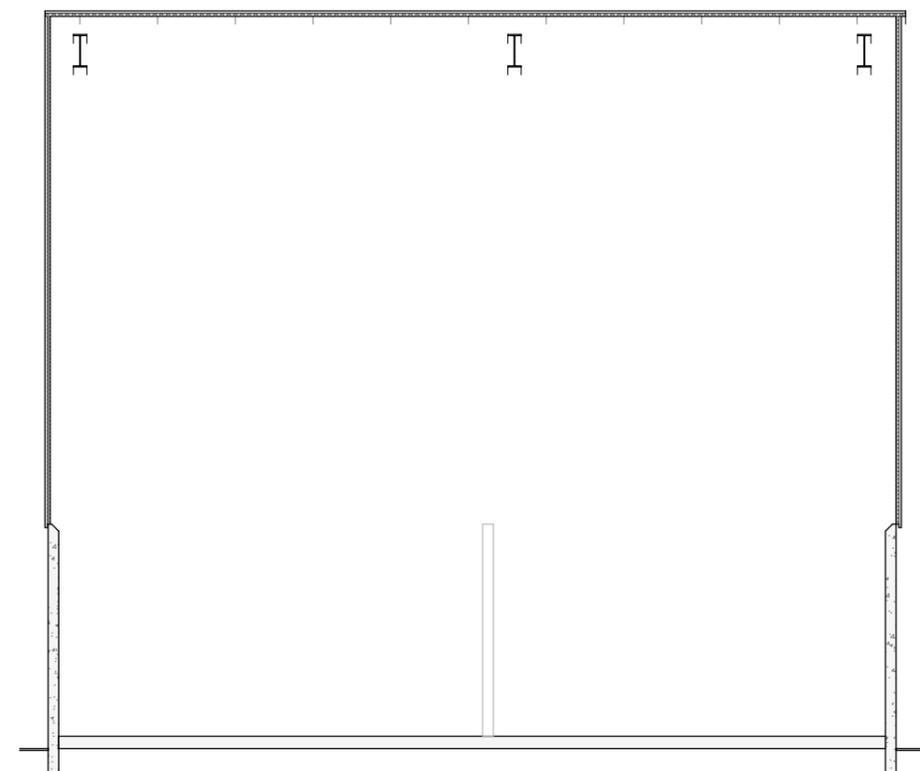
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 CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE

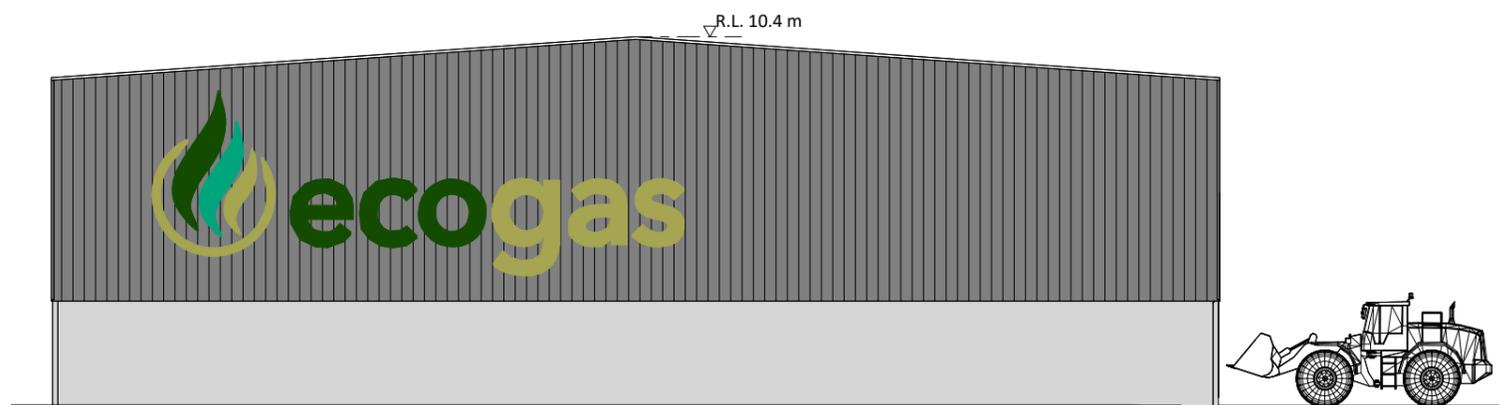
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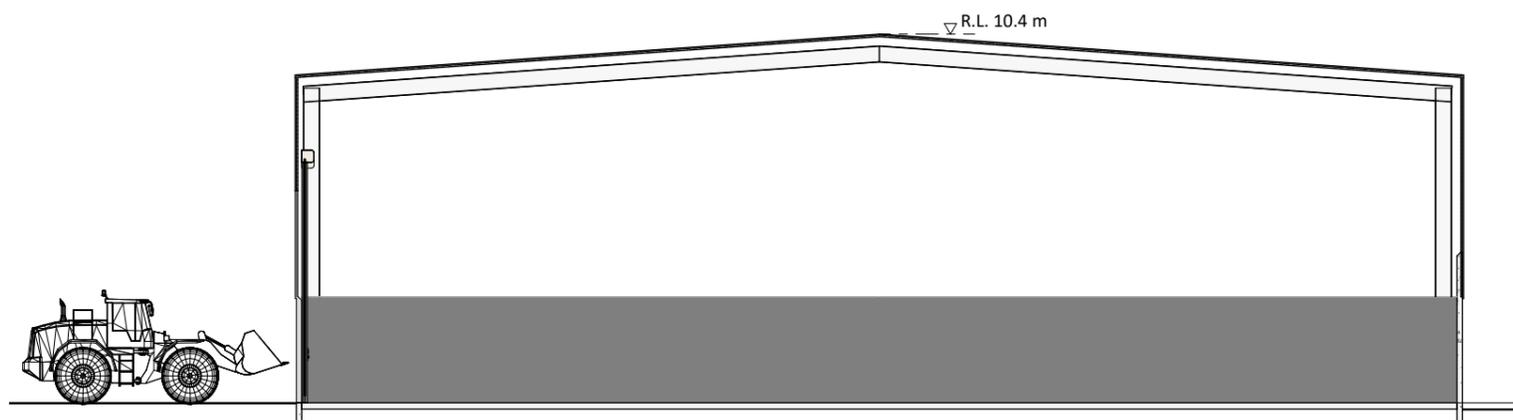
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3A BIOMASS FUEL BUILDING SECTION
1:50@A1



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1:100@A1



1 BIOMASS FUEL BUILDING SECTION
1:100@A1



D BIOMASS FUEL BUILDING ELEVATION NORTH WEST
1:100@A1

3	RESOURCE CONSENT UPDATE	CAW	RB	27.06.24
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1	RESOURCE CONSENT	CAW	RB	18.03.24
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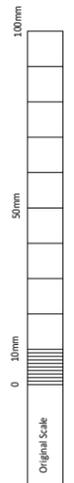
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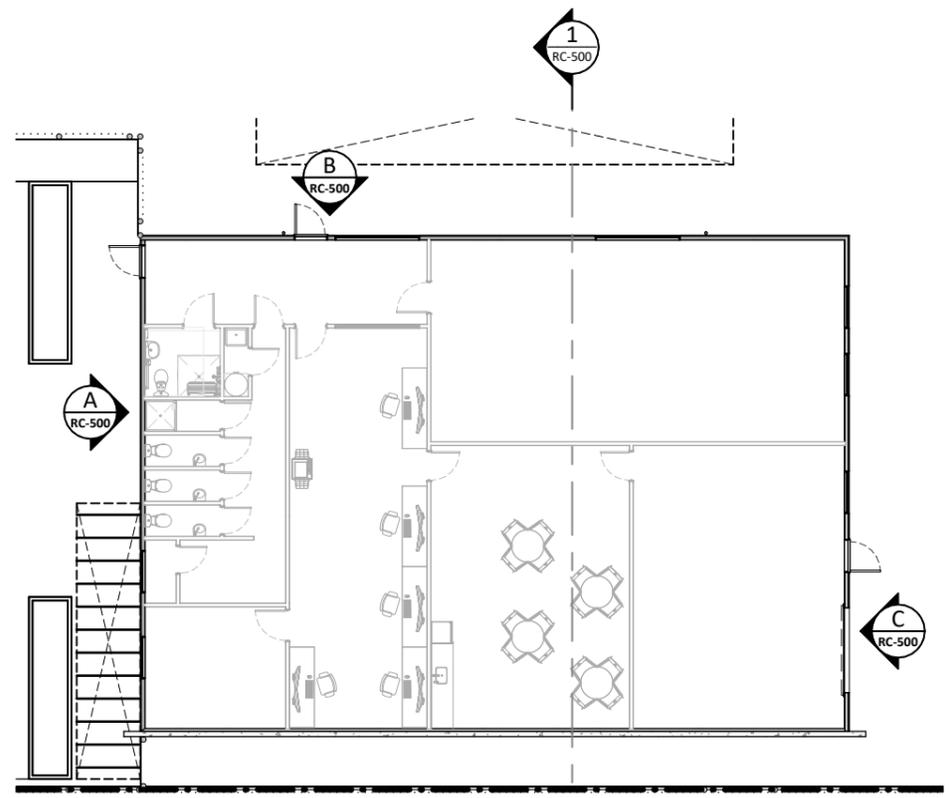
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Project Start Date	Original Size	
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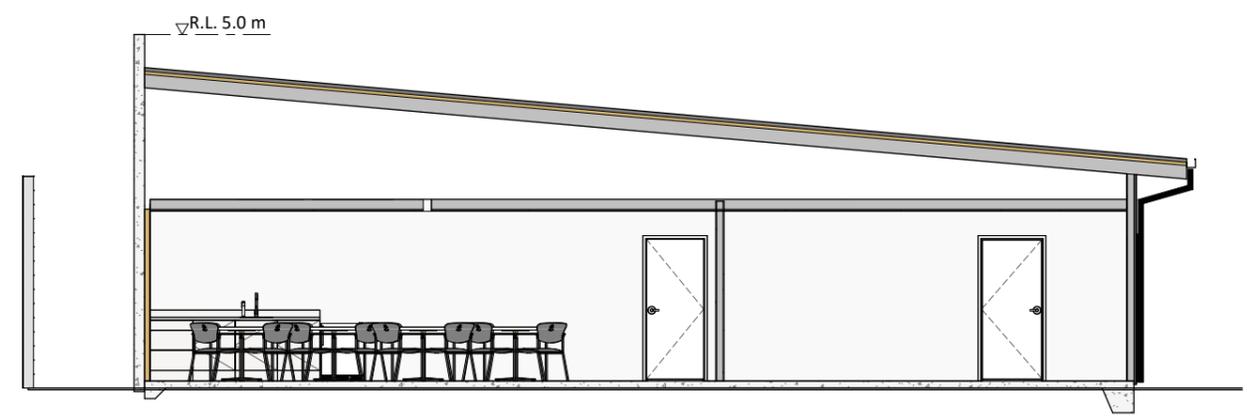
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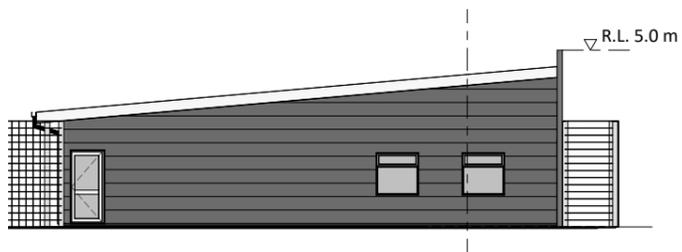




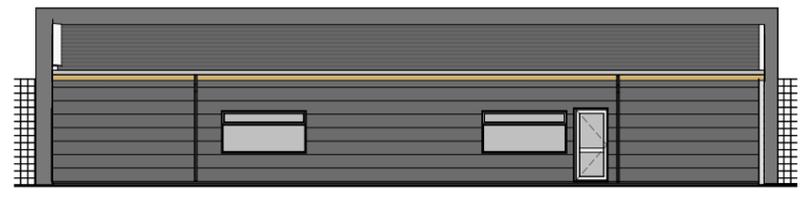
4 AMENITIES PLAN
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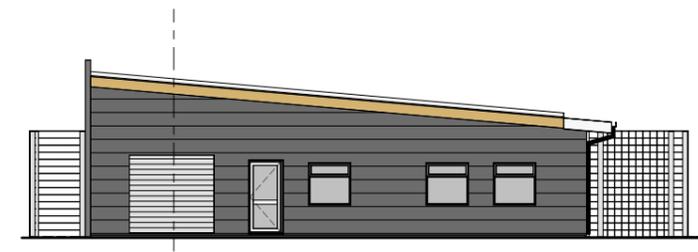
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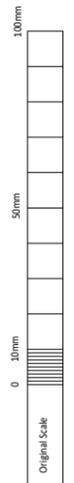
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C AMENITIES ELEVATION SOUTH EAST
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Issue / Details		By	Chkd	Date

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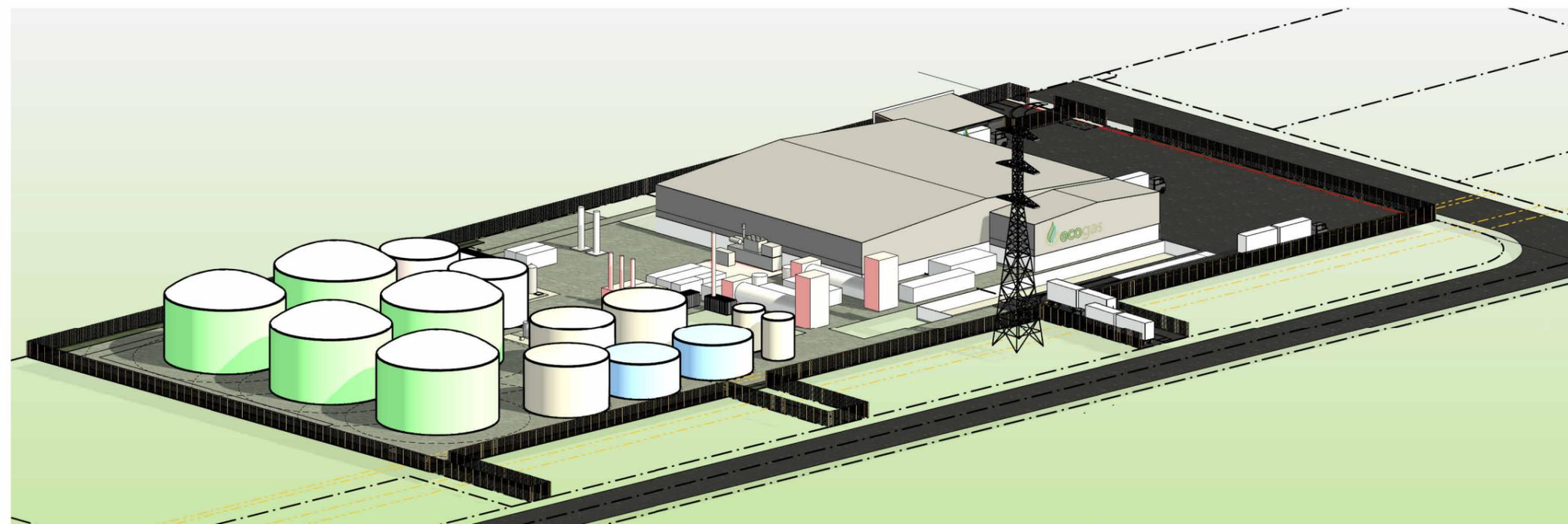
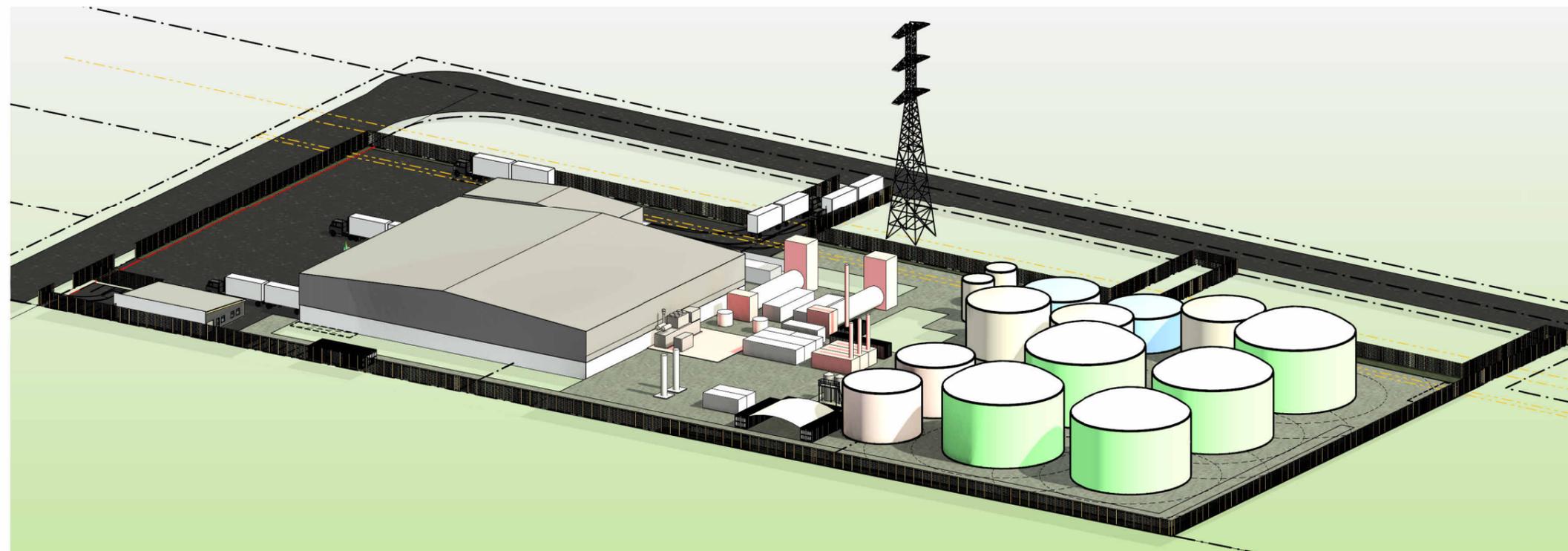
Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
AMENITIES BUILDING PLAN ELEVATIONS AND SECTION

Designed	Scale	Drawn
RB	As indicated	CAW
Project Start Date	Original Size	
FEBRUARY 2024	A1	
Job No	Drawing No	Issue
23-111	RC-500	3

RESOURCE CONSENT
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE

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Issue / Details		By	Chkd	Date

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Project
ECOGAS CHRISTCHURCH - ORGANICS PROCESSING FACILITY

Drawing Title
3D ISOMETRIC VIEWS

Designed	Scale	Drawn
RB		CAW
Project Start Date	Original Size	
FEBRUARY 2024	A1	
Job No	Drawing No	Issue
23-111	RC-600	3

RESOURCE CONSENT
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ARCHITECTURAL



Environmental Management Plan

Organics Processing Facility

Ōtautahi Christchurch

Version	Description	Date
Draft	Draft	January 2024
A	Resource Consent Issue	May 2024

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1 Introduction

Ecogas Limited Partnership proposes to establish an Organics Processing Facility (OPF) on the property located at 17-21 Aruhe Road, Hornby, Christchurch. A site layout plan is provided in the appendix. The purpose of the plant is to receive up to 100,000 tonnes per annum of organic feedstock (food and garden) from households via kerbside collection, commercial and industrial sources. The feedstock will be transported to site in either solid, slurry or liquid form and processed to produce biogas, biomass, electricity, and liquid biofertiliser.

The Environmental Management Plan (EMP) has been prepared to address the management of any actual or potential discharges that may arise during an Industrial /Trade activity (including hazardous substances) onto land or into rivers, streams, groundwater aquifers or coastal water ways, as well as discharge to air.

The primary goal of this EMP is to provide practices and procedures to avoid discharges in the first instance, and where discharges are unavoidable, provide robust mechanisms to minimise the discharge of contaminants from site.

1.1 Scope

This EMP applies to the Ōtautahi Christchurch Organics Processing Facility Site located at **17-21 Aruhe Road, Hornby**.

The EMP addresses the development of the OPF and once operational, the scope of the EMP covers all activities on site from the acceptance of feedstock on, sorting of feedstock, anaerobic digestion (AD) process, biomass fuel process to produce finished products of biogas, biomass fuel, electricity and biofertiliser, to the dispatch of end-product from site.

The EMP will comply with conditions stated in relevant resource consent and contract documents.

Current Ecogas sites are certified to the ISO 14001 Environmental Management Standard. Once operational, the Ōtautahi Christchurch OPF will be audited against this standard, therefore this EMP has additionally been written to comply with ISO 14001 requirements.

1.2 Reviewing the EMP

The EMP will be reviewed every three years.

In the event of any specific incidences on site, or detailed changes to the regulatory framework, an additional review of the EMP may be necessary. Any specific one-off reviews of the EMP do not replace the need for the standard review but should be undertaken regardless to ensure that the site operates in accordance with best practice and in compliance with the applicable regulatory framework.

2 Confidentiality of Manual

Any external party shall, at all times, treat the Manual and the information contained therein, as confidential, and shall maintain such information as confidential. They shall not at any time, without prior written consent of Ecogas, copy, duplicate, record or otherwise reproduce the Manual, in whole or in part, or otherwise make the same available to any unauthorised person.

3 Abbreviations and Definitions

AD: Anaerobic Digestion

BES: Building Extraction System

CCC: Christchurch City Council

CHP: Combined Heat and Power

ECan: Environment Canterbury

EMP: Environment Management Plan

FOGO: Food Organics and Garden Organics

HMI: Human Machine Interface

MCC: Motor Control Centre

Mfiles: Document Management Software

OPF: Organic Processing Facility

PLC: Programmable Logic Controlled

Promapp: Process Management Software

PSES: Point Source Extraction System

SDS: Safety Data Sheet

TAG: Maintenance Management Software

QMS: Quality Management System

WZweigh: Weighbridge and Scale Management Software

4 Regulatory Matters

Ecogas Limited Partnership holds the following resources consents and permits for the operation of an Organics Processing Facility from the Christchurch City Council (CCC) and Environment Canterbury (ECan):

To be updated following granting of consent

Document	Issued by	Date of approval/issue

The environmental impacts of activities are primarily controlled by the Resource Management Act 1991, legislation that Ecogas is compliant with, by obtaining resource consents from regional and district council.

This EMP has been prepared in specific consideration of the requirements of the plant and contains the following specific information:

- Site management methods implemented to avoid discharges of hazardous substances onto or into land, water or air.
- Primary treatment mechanisms implemented on site to avoid, remedy, and mitigate potential adverse effects on the environment.
- Specific manufacturer recommendations for the operation and maintenance of treatment devices implemented on site.
- Monitoring, management, and reporting streams implemented as part of the development of the facility to ensure that environmental performance is maintained for the operational life of the facility.
- Identification of potentially hazardous substances associated with the operation of the OPF and consideration to the storage of small volumes of hazardous substances on site.

5 Roles, Responsibilities and Authorities

The Operations Manager will be the primary responsible person for implementing this EMP as part of the day-to-day operations and responding to any incidences or complaints.

The individual site operators will report directly to the Operations Manager in the event of any incidents or complaints onsite, to which the Operations Manager will enact the relevant provisions of this Plan and any other documentation associated with the operation of the OPF.

Staff responsibilities specific to the EMP:

Role	Responsibilities
Senior Management	<ul style="list-style-type: none"> • Provide support and resources to develop and maintain the EMP
Operations Manager	<ul style="list-style-type: none"> • Implementation of the EMP including any day-to-day monitoring and reporting requirements • Ensure operators are competently trained regarding EMP conditions • Respond to any incidents or complaints associated with the EMP
Compliance Officer	<ul style="list-style-type: none"> • Develop the EMP, taking into consideration ISO 14001, regional and district council resource consents, and any other relevant sources of compliance • Assist with training of staff against the EMP • Compile reports required by external stakeholders • Conduct regular internal audits, prepare internal and external audit reports • Review the EMP to keep it relevant and fit for purpose
Operators/Technicians	<ul style="list-style-type: none"> • Responsible for ensuring the EMP and related operating procedures are followed, and that the environmental risks and incidents are reported to management

6 Health & Safety

Ecogas Limited Partnership will document the minimum health and safety requirements for personnel, contractors, and visitors to the facility. Requirements will be set out in a Health and Safety Plan.

Once operational, the site will be audited against the ISO 45001 Health and Safety management standard, as all previous Ecogas sites have been audited and accredited with this standard.

7 Emergency Response and Business Continuity

Based on risks identified in the EMP, Ecogas has developed draft preliminary Emergency Response Plan. Further to that, a Business Continuity Plan will be developed following the grant of the resource consent. These are subject to an update based on the resource consent conditions stipulated by the consenting authorities and further developments during the detailed design of the facility.

8 Site Development

The proposed development of the site will include:

- Site access from Aruhe Road
- Weighbridge
- A Processing Building to be utilised as the primary delivery location for incoming feedstock and for the pretreatment of feedstock. It includes bunkers for delivery of solid feedstock. Pretreatment machinery will consist of several processing lines consisting of a combination of separation equipment, macerator, and pumping systems to deliver feedstock to their respective processing systems.
- External drive-through bays for delivery of liquid feedstock or load out of liquid biofertiliser.
- Anaerobic digestion (AD) process infrastructure: 2x hydrolysis (inlet) tank, 4x digestion tanks, 2x liquid fertiliser (outlet) tank.
- Digestate treatment, screening and pasteurisation
- Biogas treatment equipment and pipework
- Enclosed gas flare
- Combined heat and power (CHP) biogas generator
- Biogas boilers
- Green organics chipping and processing
- Green organics and digestate fibre dryer
- Site office, meeting room and amenities
- Biomass Fuel Building for storage of dried fibre briquettes and dried chip
- Paved yard areas
- Stormwater drainage to collection point and into ground soakage
- Raw stormwater tank
- Fire water tank

Please note the above is subject to change.

The site is currently in pasture. The proposed development plans are attached in the appendix.

9 Key Stakeholders

Stakeholder	Role
Christchurch City Council	Feedstock supplier Utilities provider Consenting Authority
Environment Canterbury	Consenting Authority
Ngai Tahu Property	Site developer
Neighbouring businesses	Neighbours
Councillors, Community Board Members, Residents Association representatives	Neighbours
Whitiora	Iwi, local Runanga
Other feedstock suppliers	Feedstock suppliers
End product customers	Customers
Orion Energy Transpower	Electricity network providers,
Pioneer Energy, EcoStock	Shareholders, Partners

Our relationship with our stakeholders vary in their purpose and commitment, but our strategy for engaging with and managing stakeholder relationship will in principle be guided by the Ecogas values:

- Be genuine – Operate with integrity, always.
- Be mindful – We seek to protect and improve our place in the world. Community, Environment, Welfare.
- Be collaborative – We partner with likeminded organisations to make an impact.

10 Environmental Risks and Opportunities

The following environmental risks have been identified and their structural and operational treatment is described and discussed in the following sections:

- Waste/Feedstock
- Odour
- Dust
- Liquid discharge to land
- Fire
- Air emissions
- Noise
- Earthquake

11 Site Operations

The plant will have personnel comprising of an Operations Manager, Plant Operators and Technicians working in both the plant and office, supported by a Compliance and Quality Adviser.

Staff operating hours are expected to be varying shifts between 6:00am to 6:00pm and work may extend beyond these hours dependent on processing requirements.

The anaerobic digestion, biomass fuel drying and other associated process will run continuously in an automated controlled mode 24 hours a day.

The site will be powered by an onsite biogas generator with a backup supply connection from the power grid. The transition between these two sources will be fully automated to minimise any disruption to the site.

The plant is controlled from a Main Control Centre (MCC) and the control is provided by a programmable logic controlled (PLC). Process status display and control parameters are monitored and adjusted via the MCCs human machine interface (HMI). The operation and adjustment of the HMI is by trained staff only. The MCC is connected to a SCADA system for remote system monitoring (in the office building or elsewhere), operation, rectification and intervention if required. The Plant Operators will have remote access to the SCADA to address and potentially rectify (where possible) out of the ordinary situations during unstaffed hours.

The process and safety critical items, including process controls and SCADA are connected to the Uninterrupted Power Supply (UPS).

All receipt, processing, storage and disposal of organic materials and the end products will occur in fully enclosed buildings or infrastructure such as pipes, tanks or silos.

11.1 Receival of Feedstock

Incoming trucks pass over a weighbridge where their weight is recorded, and number plate captured. Trucks will unload input solid feedstock inside a Processing Building to the appropriate unloading bay area. Liquid feedstock is unloaded via external unloading bays. At this point, plant operators will have first sight of the feedstock and will be able to remove any large or problematic materials prior to de-packaging/processing. Every load is inspected for levels of contamination, prohibited materials, and to ensure it complies with the details of the written supply agreement. There is a sufficient capacity to store up to 48 hours' worth of supply in the Processing Building bunkers.

There are three sources of feedstock, defined below.

11.1.1 FOGO and Food Organics

Food Organics and Garden Organics (FOGO) will be collected from residents as kerbside collection. Upon delivery, it will be deposited within a specified area within the Processing Building to be fed into the processing equipment via a front-end loader. In addition, there will be food organics from commercial operations or source separated foodscraps from other locations that will also be deposited into a dedicated bay, depacked if necessary and then fed into the additional food organics only line.

11.1.2 Green Organics

Green organic material, resulting from commercial activities, landscape maintenance services, arboriculture business activities, and from council green recycling sites and residential garden organics. It includes a wide range of green organic material. Upon delivery, it will be deposited within a specified area within the processing building to be fed into the processing equipment via a front-end loader.

11.1.3 Liquid feedstock

Liquid organic feedstock will be imported by tankers and offloaded at a designated location. An on-site pump will facilitate the transfer and a stone trap will protect the pump from potentially large objects in the imported feedstocks.

11.2 Processing Lines

FOGO will be inspected before a front-end loader transfers the material from the drop area into the processing equipment. The processing line will sort the raw material, remove any contamination and reduce it to a uniform size. Large fibrous elements will be separated and sent to the Green Organics processing line. The decontaminated organic material will be macerated into a slurry and then pumped onwards to a common grit removal (below). Within the processing units, diluent will be added from the various liquid sources. The FOGO pre-processing outputs are as follow:

- FOGO 'soup' at a consistent dry solids content
- Contamination removed will be sent to a suitable disposal or recycling facility

Commercial and other source-separated food organics will be inspected before a front-end loader transfers the material from the drop area into the processing equipment. The processing line includes de-packaging systems that are designed to remove packaging materials from the organic portion.

The organic material will be macerated, then pumped onwards to a common grit removal (below). Within the de-packaging units, diluent will be added from the various liquid sources. The food organics pre-processing outputs are as follow:

- Food 'soup' at a consistent dry solids content
- Contamination removed will be sent to a suitable disposal or recycling facility

The FOGO and Food 'soups' will be pumped along a common pipeline to a bespoke grit removal plant. De-gritted soup will be transferred to the AD plant (Inlet tanks) by feedstock pumps. The grit will be washed and sent to a suitable disposal or recycling facility.

Green Organic material will be screened to separate the digestible elements (grass clippings) from the non-digestible (wood). The non-digestible materials, including those removed from the FOGO processing line (above), will be chipped and dried, if necessary, for Biomass fuel.

The digestible undersized or light material will be sent to the FOGO or food organics processing line. Stones or other contaminants will be sent for disposal or recycling.

11.3 Tank Farm

11.3.1 Hydrolysis/Inlet tank

The pre-treated soup feedstock will undergo an acidic hydrolysis step in the inlet tank to start the biological process before being transferred on to the methane producing digesters.

The gases produced from the Inlet tanks, consisting mostly of carbon dioxide, will be contained in the headspace and connected to the common gas system.

11.3.2 AD tanks

After hydrolysis, the feedstock will undergo methane fermentation process to convert the hydrolysed feedstock to biogas and digestate.

The digestate will contain undigested fibre. The fibrous material from the digestate will be separated, pressed, and dried for use as Biomass fuel. The liquid portion of the digestate will be sent to the pasteuriser for processing into biofertiliser. A portion of the digestate separated liquid will be further conditioned for reuse as a diluent in the feedstock pre-processing.

The gases produced from the AD tanks will be contained in the headspace and connected to the common gas system. The gas is expected to contain 50-60% of methane, 40-50% of carbon dioxide and low concentration of nitrogen and hydrogen sulphide.

11.3.3 Pasteuriser

All liquid digestate destined for external markets will be pasteurised to a minimum of 70°C for one hour. The SCADA system will continually monitor temperature of the pasteurisation loop and vessels, with digestate unable to leave pasteurisation vessels unless time and temperature critical limits are achieved.

11.3.4 Digestate Storage/Outlet tanks

The end-product biofertiliser will be stored in a Digestate Storage outlet tank. The biofertiliser will be loaded into tankers for transport to end users via a purpose-built loadout area.

11.4 Biomass Fuel Plant

11.4.1 Green Organics Processing

After processing, which involves chipping, sorting and decontamination, the biomass fuel will be stored for a short period before being loaded out into truck and trailer units to be transported offsite for end use as a substitute to fossil fuels. The storage and loading of dried biomass fuel products will take place in the dedicated Biomass Fuel Building. The undried biomass fuel from the commercial green organics and FOGO will be loaded onto trucks in the main Processing Building.

11.4.2 Digestate fibre dryer

Fibre separated from the digestate will be dried, densified and stored within the Biomass fuel building prior to loadout and despatch to the end user.

11.5 Process Monitoring

Key process monitoring procedures

PROCESS	MONITORING & CONTROLS
Receipt of feedstock	FOGO, Food organics and Green organics feedstocks arriving at site will be scheduled to minimise cross over or waiting time, and consequently the risk of odour emission. The collection and transport contractors will be encouraged to schedule deliveries in line with the design capacity of the processing systems to minimise waiting times.
Storage and handling	Flow of product will target adequate turnover to avoid accumulation of older feedstock. The received feedstock will not be stored for longer than 48 hours apart from during unforeseen circumstances.
AD Process	The anaerobic digestion process will be monitored via inline instrumentation and additional analyses of process indicators to ensure the process is achieving the required breakdown of materials and producing stable and consistent outputs (biogas, digestate). The principles of HACCP analysis will be applied to identify critical control points.
Processing and storage tanks	Tanks' levels, gas pressure and output will be monitored via the control system and alarms set up at key parameters. At a high-level alarm, the tanks will automatically stop filling and trigger the need for an operator investigation. Operators will monitor the condition of the plant as part of daily operations. Scheduled maintenance inspections in line with TAG requirements.
Biogas utilisation	Continuous monitoring of the composition in the raw and conditioned biogas will be carried. Parameters set regarding the out of ordinary operating concentration will be monitored to alert the operator that further action is required.
Building Containment	Building pressure and minimum pressure values will be set at the time of commissioning and visual inspections carried out to ensure the system is in good condition and performing as commissioned. Yearly inspections to be carried out in line with the building warrant of fitness (bWOF).
Ventilation System	The building ventilation system will be continuously monitored via the site SCADA systems with alarms set to alert the operators. Inspections will be carried out internally through TAG maintenance system as required.
Combustion equipment	Regular servicing of the combustion equipment is undertaken in accordance with the manufacturer's requirements. Any biogas produced is preferentially combusted via the CHP systems, or boilers on site. If necessary, excess biogas will be burned via a flare.
Process monitoring equipment	Regular inspections will be carried out as part of preventative maintenance programme. SCADA to capture data and alert operators if parameters set on monitoring equipment are breached.

12 Odour

Odour may be released through the following parts of the process:

- Processing building – solid raw organic feedstocks potential to emit odour during transfer. Unloading solid feedstocks from trucks will be undertaken inside the Processing building that is fully contained and filtered through the biofilter.
- Liquid feedstock – for the raw liquid waste streams (e.g., DAF sludges), a potential odour release may occur during unloading from tanker truck to tank.
- Biomass fuel building – potential for a compost-type odour from solid fraction of digestate when processing to biofuel.
- Emergency biogas venting – in the extreme situation of an insufficient offtake of biogas into utilisation devices (CHP, flare, boiler), the gas will be temporarily released to avoid excessive pressure build up in tanks and other sealed systems.
- Biogas combustion in CHP, flare & boiler – combusting biogas generated through anaerobic digestion. The biogas will inherently be odorous when combusted due to the presence of odorous compounds within it.
- Biofilter - The biofilter effectively treats the odorous airstream from the processing building and the biomass drying process. Very little odour will be released out the stack, where additional dilution through dispersion will occur.
- Storage and handling of digestate liquid – digestate liquid from the AD process will be sold by Ecogas as a fertiliser. It will contain odorous compounds (mostly as dissolved gasses) that could be released when handled.
- Spills and tracking of organic materials – there is a minimal chance of the organic materials, feedstock or products, to be spilled (liquid) or tracked (solids) outside of the odour contained area and cause short-term release of odour.
- Process upset conditions – odour may be released as a consequence of process disruption/failure, a mechanical breakdown or a biological process upset.

The point source locations of these odour sources will be from across the site with limited fugitive emissions through effective site design. All particularly odorous process will be contained, and the discharge treated to limit the effect on the environment.

12.1 Odour Management

12.1.1 Processing Building

The Processing Building will be held under a slight negative pressure to capture and extract all odours from within the building. The building will also be fitted with fast-closing doors to ensure all offloading of feedstock takes place in a fully enclosed environment. By design, the ambient temperatures within the Processing Building are minimised to prevent premature decomposition prior to processing.

12.1.1.1 Building extraction system and biofilter

The extraction and biofilter system are sized to deliver 3 air changes from the Processing Building per hour.

The air extracted from the Processing building is captured through the internal ducting system, recycled through the fibre dryer (serving as a drying medium after heating), and then passed through the biological air filter for removal of odour. If the fibre dryer is not operating, the air from the processing building will be directed to pass directly through the biological filter.

The biofilter medium will be maintained in a humid environment allowing a habitat for odour-removing organisms. It will be designed as a modular system allowing to take one module out of service for maintenance while maintaining the target extraction and treatment rate. The biofilter will be maintained as per the designers' requirements. This may include monitoring of the gas pressure drop across the scrubber as an indication of potential blockage/short-circuiting and/or monitoring of the moisture content inside the scrubber.

12.1.2 Liquid feedstock

Liquid feedstock will be unloaded from delivery tankers will be via a direct pipe connection transfer limiting exposure to ambient air. There is a potential for a short release of odorous air during decoupling of the tanker and the unloading pipework. If required, the unloading station can be equipped with an air capture system (hood) to minimise this.

The Process Water tank will be equipped with a dedicated carbon filter for any offgas potentially released. The residence time in the tank will be very short, reducing the probability of any gas evolving. Where possible, liquid feedstocks will be unloaded directly into one of the Inlet tanks.

12.1.3 Biomass fuel processing

The green organics will be processed inside the fully contained Processing Building connected to the odour biofilter.

The digestate fibre will be dried and when there is sufficient heat and capacity some of the commercial green fraction will also be dried. This drying process will drive off moisture and be potentially odorous. The drying offgas will be contained within the dryer and treated in the odour biofilter prior to release into the atmosphere.

The storage and loading out of the dry biomass fuel products will take place inside a fully contained dedicated Biomass Fuel building equipped with rapid roller doors.

The main green chipped fraction for the Commercial Organics and woody fibre fraction of the FOGO will be processed and loaded out of the main Processing Building. The Processing Building ventilation system exhaust is connected to the odour biofilter.

12.1.4 Emergency biogas venting

The facility is designed to maximise utilisation of biogas for heat and/or power generation. Unutilised gas has a direct negative impact on the commercial performance of the business.

The facility is designed to utilise biogas as it is being produced. There is only a limited biogas storage capacity inside the digester tanks headspace and the gas transmission pipework. The gas inside the containment vessels (tanks, pipes) is present at very low gas pressure.

Excess or out-of-spec biogas, such as during high peak processing or commissioning, will be safely disposed of by flaring. Two flares will be installed to ensure processing redundancy.

All gas containing tanks (inlet, digesters, outlet, pasteuriser) will be interconnected to assimilate peak gas production from the individual tanks and fitted with gas pressure monitoring systems to alert the operators to any unexpected changes.

The gas containing tanks will also be fitted with Pressure Relief Valves that will release biogas into the atmosphere in the extreme situations when the biogas cannot be removed fast enough. This is likely to be a short (20-30 sec) release only. The PRV will be equipped with position switches alerting the operators of any venting incidents. These will be attended to with urgency and rectified as soon as possible.

12.1.5 Biogas combustion

The flare is designed as an efficient combustion process which will result in a high rate of destruction and oxidation of odorous compounds. The CHP are internal combustion engines that are more limited in their ability to destroy and oxidise gas compounds hence their potential for odour emission is greater. The boiler uses a small amount of biogas and will be more efficient at destroying and oxidising gas compounds than an internal combustion engine. All three sources will have stacks that will assist in the dispersion of emissions to a point that will limit effects on the environment.

12.1.6 Digestate storage and loading

Digestate storage tanks will be aerated to oxidise odour-bearing components with the off gas contained and treated via a dedicated odour filter. During transfer and loading of this liquid into tankers for distribution, odour release will be limited by venting of the displaced air in the tankers. If required, a hood and carbon filter can be fitted into the loadout station to capture this stream.

12.1.7 Spills and tracking of organics

The site will be frequently washed down, including processing floors, to prevent the potential for odorous materials accumulating. All washdown water will be collected and used as a diluent.

Any spills outside of the Processing building will be treated with urgency and dealt with adequately to the nature, size and material of the spill. The site bund will contain extreme spills or leaks.

12.1.8 Process upset conditions

A facility of this kind needs to be aware of the potential for process upsets, e.g. system/process failure/disruption, mechanical breakdown or human error. Further to that, the biochemical nature of the anaerobic digestion gives rise to the potential of a biological upset by e.g. bacteria-inhibiting contamination in the feedstock.

For system, process, mechanical aspects of the plant, a Hazard and Operability Analysis (HAZOP) will be carried out during detailed design across all aspects of the plant and their interconnections to identify the potential points of failure. Where the risk of these is assessed as beyond acceptable, additional measures or equipment will be installed to reduce it.

The status of the biological process will be continuously monitored using process indicators (gas quality, gas yield, pH, process balance). The operators will adjust the plant parameters or feedstock composition as necessary where signs of upset are detected. All feedstocks will undergo extensive due diligence prior to commercial acceptance and then inspection upon receipt to the facility in order to minimise the risk of bacterial inhibition. Regular audits will be conducted on commercial and industrial feedstocks.

The plant operators will plan for and maintain a suitable mixture of feedstock in order to avoid digester upsets.

The plant will be designed with sufficient redundancy to allow operators to take one digester offline or reduce its feed rate in case of an upset.

12.2 Monitoring Odour

12.2.1 Odour assessments

To self-monitor the performance of the odour control systems, regular odour assessments will be undertaken during plant operating hours. These observations will be carried out by the Operations Manager or designated operator via walking or driving within the site and downwind from the plant on or near the site property boundary.

The assessment will record the following information:

- Date & time
- List of what was checked
- Location of downwind assessment
- Notes on whether odour was detected (character, location, intensity, subsequent actions)

If an out of the ordinary or strong odour is detected which is plausibly from the plant, the assessor will investigate by identifying the source and rectifying the cause.

If required, independent assessments by a suitable qualified and experienced person can be carried out after a period of concern.

Upon commissioning and then regularly thereafter (as deemed practical), the facility will also undertake a gas leak detection survey to identify and rectify any non-obvious and unexpected fugitive gas releases.

12.2.2 BES/PSES Monitoring, Testing & Reporting

This will be updated post granting of consent with inspections and monitoring events specific to the building extraction system (BES) and point source extraction system (PSES) and will include biofilter checks as per the designers/manufacturers requirements.

Monitoring and testing events will be entered to the maintenance system (TAG) to ensure they are completed at the required frequency.

13 Dust

The biomass fuel processing and drying is expected to generate dust. All of these activities will be carried out in enclosed buildings with a building extraction system connected to the biofilter. The building extraction and ventilation system will be designed to handle the anticipated level of dust arising from these activities. The fibre dryer will be equipped with an air baghouse filter (or equivalent) to effectively collect the dust and reduce the particle load on the biofilter.

14 Water

14.1 Stormwater

Stormwater (SW) runoff will initially be over ground to collection points and piped to the stormwater buffer area or overground direct to the stormwater buffer area. It will then be pumped to the stormwater storage tank for use in the process. When not required, it will also discharge to offsite stormwater swales when the buffer area and stormwater storage tank are full. The quality of the stormwater will be monitored and will not be discharged if contaminated.

The bunded area around the tank farm is designed to contain the equivalent volume of the largest tank on site with additional 200mm, sufficient freeboard to contain additional stormwater volume equivalent to a 1 in 100 year storm event over 72 hours.

Ecogas operations staff will monitor and undertake maintenance of the stormwater system. They will ensure that the site is maintained in a condition to minimise the sediment loading of any stormwater discharge generated at the site. This includes regular site sweeping, and cleaning of stormwater sumps and buffer containment area.

14.1.1 Stormwater discharge monitoring

Stormwater discharge to ground or off the site would occur if the stormwater storage tank system was at capacity and additional rainfall was received. Water quality will be continuously monitored and not released when water quality does not comply with requirements. Non-compliant water will be reused in the processing or removed and disposed of by trucks.

14.2 Wash Water to Process water

The primary source of wash water to process water from the site will be through the following:

- Washdown water to keep the floor of the Processing Building clean and tidy
- Truck wash onto the Processing Building floor.
- Catchment slabs adjacent to key equipment with a potential for minor process liquid discharge to the ground during maintenance (e.g. valve replacement on a mixing pump).

All wash water contains valuable nutrient for the process, it will be collected and transferred via a custom drainage system to the process water storage tank. The tank levels will be monitored via the SCADA system. During a rain event, the above outdoor collection systems will run for a sufficient period to capture the first flush and then revert to discharge to stormwater.

14.3 Wastewater and Amenities Block

The waste water from the amenities (bathrooms, kitchen, office) and toilets onsite will be piped to the council reticulation sewer system.

14.4 Fire Water

In the unlikely event of a fire on site, all fire water would be collected in the buffer area and removed through trucks for disposal to a compliant disposal facility.

14.5 Overflow

In areas with a potential for minor liquid discharge to the ground during maintenance (e.g. valve replacement on a mixing pump), a collection slab will direct flow to a sump that will be pumped into the process water storage tank. The initial stages of rain events will also serve as a wash down of these areas, as the pump system will run for a period to transfer all the initial runoff to the SW tank.

In the case of a large overflow, runoff from yard and outdoor process areas are directed to the stormwater buffer area. This will be maintained in a pumped down state to ensure that contaminants if any are removed from open storage and pumped to the stormwater storage tank and then distributed for use within the process. The stormwater discharge monitoring system will effectively manage the situation if the stormwater tank is full and additional rainfall is received.

15 Fire

The potential sources of fire are:

- Dry feedstock material in bunkers
- Biomass fuel storage
- Biogas

Biogas as a source of risk is discussed below in the Flammable and explosive substances section.

The potential of fire arising from the storage of dry feedstock or biomass fuel is low due to very short retention period on site. This will be subject to a comprehensive fire risk assessment.

Resulting from that, the Processing building, and the Biomass fuel building will be designed with appropriate fire suppression system. The base design of the facility includes a fire water storage tank with a volume 1,000 m³.

16 Air Emissions

The AD process results in the production of a biogas consisting of approximately 60% Methane & 40% Carbon Dioxide. This is first produced inside the AD tanks and throughout the process is contained within pipework and tanks. The biogas will be conditioned prior to combustion in a CHP, biogas boilers.

An enclosed flare will be located on site capable of combusting all biogas extracted from the anaerobic digestors, pasteurisation tanks, digester hydrolysis/inlet. In the exceptional circumstance that the biogas is not able to be utilised (out of spec biogas, commissioning, CHP maintenance), it will be destroyed through the flare. The flare is designed with a 1.5 peaking factor applied over the maximum anticipated biogas production.

A flame detection system for the biogas flare will further detect any failure of the flare and triggers automatic relighting of the flare as well as activate an automatic alarm. All necessary data is to be recorded in the site's SCADA system.

Pressure release valves on the AD tanks, digester hydrolysis/inlet tanks, digester storage tank, and pasteurisation tanks may only release in the exceptional scenario where there is excess pressure remaining after combustion of the gas via the boiler or CHP engine, as well as the onsite flare.

The flare will be maintained as part of the preventative maintenance programme.

All odorous air from the processing buildings and the dryer will run through a biofilter (Section 12).

17 Noise

The site will adhere to the noise levels specified in the Christchurch District Plan for Industrial Heavy Zone. The main sources of noise will be truck movements through site, pre-processing machinery

(located within Processing Building), the odour scrubber fan and the CHP. All equipment located outside will have adequate noise attenuating enclosures to meet the boundary noise limits. Noise from the indoor equipment will be adequately attenuated through the building structure.

To be updated following granting of consent

18 Earthquake

All tanks and structures on site have been designed according to the relevant NZ and international engineering standards in consideration to the geotechnical conditions on site.

The site bund would contain any spills that may result from an earthquake in excess of those assumed in the engineering standards. All liquid and gas equipment is equipped with isolation valves to allow early isolation and shutoff of leaks. Additional leak monitoring will be facilitated by inline monitoring through SCADA.

19 General Site Management

The Operations and Maintenance Manual (OMM) will be developed in due course and will detail operational and maintenance processes as well as housekeeping required to maintain the site to a high standard.

The paved areas will be swept using a rotating brush attachment on a front end loader. Litter will be picked up by staff during daily site walkover. Weeds will be removed and all lawn and planted areas of the sites will be maintained by a contracted party.

20 Preventative Maintenance and Spares Management

The site will seek to be certified against ISO 55000 Asset Management System. The core objective of the Asset Management System is to maximise plant utilisation and identify and eliminate wasting assets. This includes regular monitoring of the state or condition of assets. Through scheduled regular maintenance the plant can achieve maximum and continuous output.

All routine preventative maintenance tasks are to be recorded in TAG. This includes any tasks which are triggered by either time, running hours, or based on condition assessments. Recording preventative maintenance tasks demonstrates what planned maintenance is scheduled, completed or overdue.

Spares of equipment critical to the effective operation of the OPF and odour control systems will be held onsite, the full list will be available on TAG. Capable staff are to be retained for the immediate repair of critical equipment. The site-specific Operations and Maintenance Manual (to be developed in due course) and supporting policies will detail this process further.

21 Dangerous goods and hazardous substances

Dangerous goods and hazardous substances specific to site processes include but are not limited to:

- Feedstock; including particulate matter from dry feedstock and biological hazards in some feedstock
- Hydrocarbons; in the form of fuels and cleaning products
- Oil and grease
- Solvents in cleaners and maintenance/lubrication products
- Biogas and exhaust emissions

Hazardous/dangerous goods held on site to operate and maintain the site will be stored according to their SDS requirements.

All chemicals will be recorded in Mfiles and a hazardous substances register will be available on site, updated as additional chemicals are added to site or removed. SDS sheets are kept on site for each chemical and refreshed every five years. Staff will be given specific chemical training if needed as part of their required competencies.

21.1 Flammable and explosive materials

The main hazard when handling biogas are the combustibility of methane and the explosiveness of methane/air mixtures. Hydrogen sulphide, nitrogen, oxygen, ammonia and hydrogen may be present in small amounts as well. The plant will be designed to adhere to the AS/NZ 60079.10.1:2009 Explosive atmospheres: Classification of areas – Explosive gas atmospheres in order to remove any potential source of ignition from areas or vessels containing gas. Hazardous areas will be identified, clearly marked and protected from ignition sources including electrical equipment, naked flames and hot sources.

The risk of fire or explosion however requires a very large ingress of air into the digester headspace, about 4 to 8 volumes of air per volume of biogas. The biogas containment (tank headspace) and transmission (pipework) system will operate at minimal pressures with continuous withdrawal and utilisation of the produced biogas. The digester cover is a partially inflated dome requiring a positive biogas pressure to operate. This makes it essentially impossible during normal operation for air to leak in against a pressure gradient. The control system will automatically modulate the gas withdrawal rate and shut it down to prevent vacuum from occurring.

The site will have lightning protection and earthing systems compliant to AS/NZS 1768:2007 - Lightning protection to eliminate the risk of direct lightning strikes.

21.2 Toxic or dangerous substances within feedstock

Toxic and dangerous substances are classed as prohibited material. Signage detailing prohibited material vs contaminating material will be displayed at site as reference material for the operators.

Loads containing prohibited materials can be rejected if it deemed unsafe to remove by the operators. There will be prohibited material skips for disposal and additional PPE available.

22 Spill Response Plan

An emergency procedure guide will be available on site and details the steps required in the event of a spill, based on the severity and type of spill that has occurred. Spill kits are available on site, staff will be trained on both the spill the response plan and spill kit location sites during the induction process.

As part of the general planned inspection, the contents of the spill kit will be checked every 6 months and components restocked if required.

23 Pest and vermin control

Ecogas will manage an effective pest control and surveillance programme within the boundary of this site, to be carried out by a qualified external company. All operational Ecogas sites utilise three lines of defence to manage the risk of pest and vermin, where:

Line 1 = perimeter of site boundary/fence (rodent stations)

Line 2 = outside perimeter of the processing buildings (rodent stations)

Line 3 = inside wall of processing buildings (rodent stations and LED insect light traps)

No poisons or baits are stored on site. These will be brought to site by the contractor when replacing bait stations as part of monthly inspections.

All baits and poisons will be contained within appropriate bait stations to minimise the risk of discharges during inclement weather and are maintained in appropriate areas to minimise the risk of disturbance.

Site visits will be at the frequency determined by the contractor, monthly at a minimum. Pest activity reports provided to Ecogas will detail the location of any observed pest activity, the type of pest detected and notes on treatments used. The pest control company may also provide recommendations for Ecogas to implement. The effectiveness of the pest control programme will be reviewed as part of the internal auditing process at Ecogas.

The Ecogas site will be routinely monitored for evidence of any vegetation that could host any organisms that could present a risk, and such vegetation removed.

24 Staff Training

All staff are required to have the necessary training to ensure that they can carry out their duties safely and competently. Until staff acquire the necessary skills and are judged competent, they work under the direct supervision of a competent person.

Staff will receive training on the contents of this EMP, which will include the necessary resource consent conditions, ISO 14001 clauses, as well as any additional resources. Internal software records and maintains staff competencies and reports can be generated to show:

- Competencies required to meet legislative requirements
- Competencies held by individual staff members
- The date by when the competency needs to be renewed

Training or induction requirements are renewed every two years.

The Ecogas Quality Management System contains further details on staff training and competencies.

25 Monitoring and Reporting

Monitoring and reporting parameters required are captured by several computer-based systems (SCADA, Promapp, TAG, Wzweigh, electronic sign in). Data generated from these various systems will be configured into reports and will be submitted to external stakeholders at the required frequency.

Quality and Compliance Advisor is generally responsible for majority of reporting with assistance from his/her management team and onsite team.

The various types of reporting include:

- Incident reporting
 - Notifying relevant parties as soon as practicable or contractually required about any environmental incident with actual or potential significance for environmental impacts, including an incident report outlining the details of the incident. Incidents may include (amongst others):
 - Fuel or chemical spills
 - System failures or malfunctions
 - Control failures or malfunctions
 - Other emergencies (eg natural disasters)
 - Other events that led to non-compliance with environmental standards or requirements
- Periodic performance reporting comprising of but not limited to:

- Assessment of environmental performance to determine whether operations are complying with environmental standards, performance measures, and statutory requirements;
- If any non-compliance is identified describe the actions and measures that have been, or are being performed to ensure compliance:
 - clearly indicating who is or will be performing these actions and measures;
 - when they were or will be conducted; and
 - how the effectiveness of these measures will be monitored over time
- Asset Management Reporting –performance data and trends relevant for assessing plant efficiency and effectiveness and allowing early detection of potential failure.

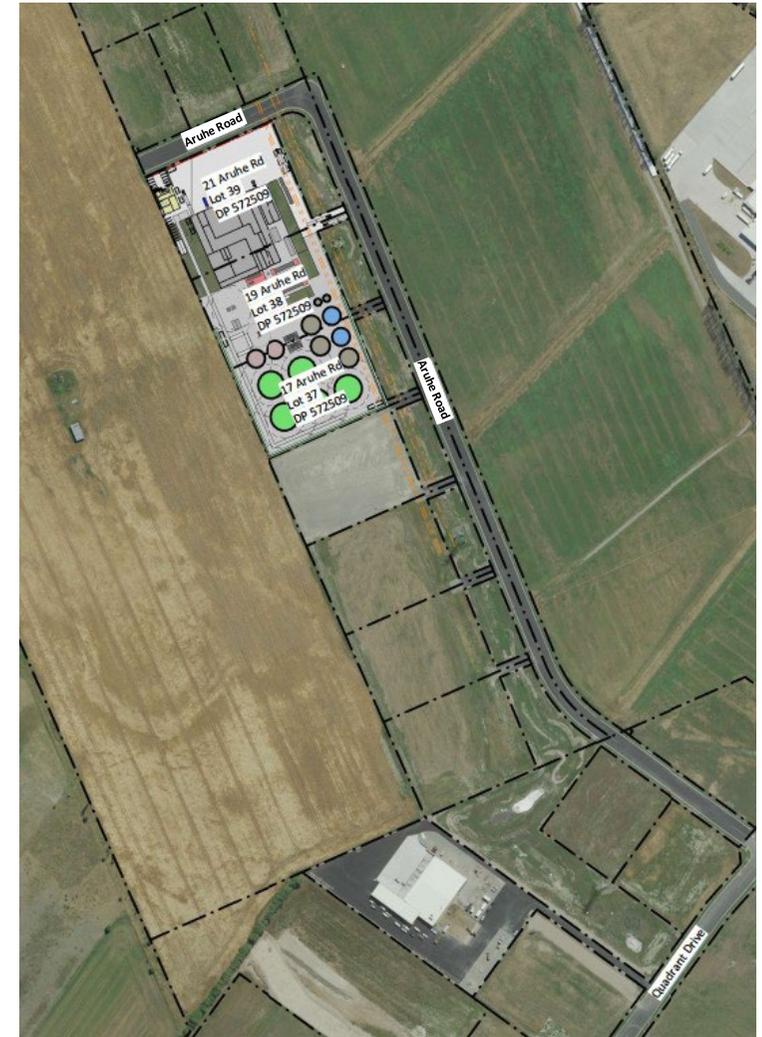
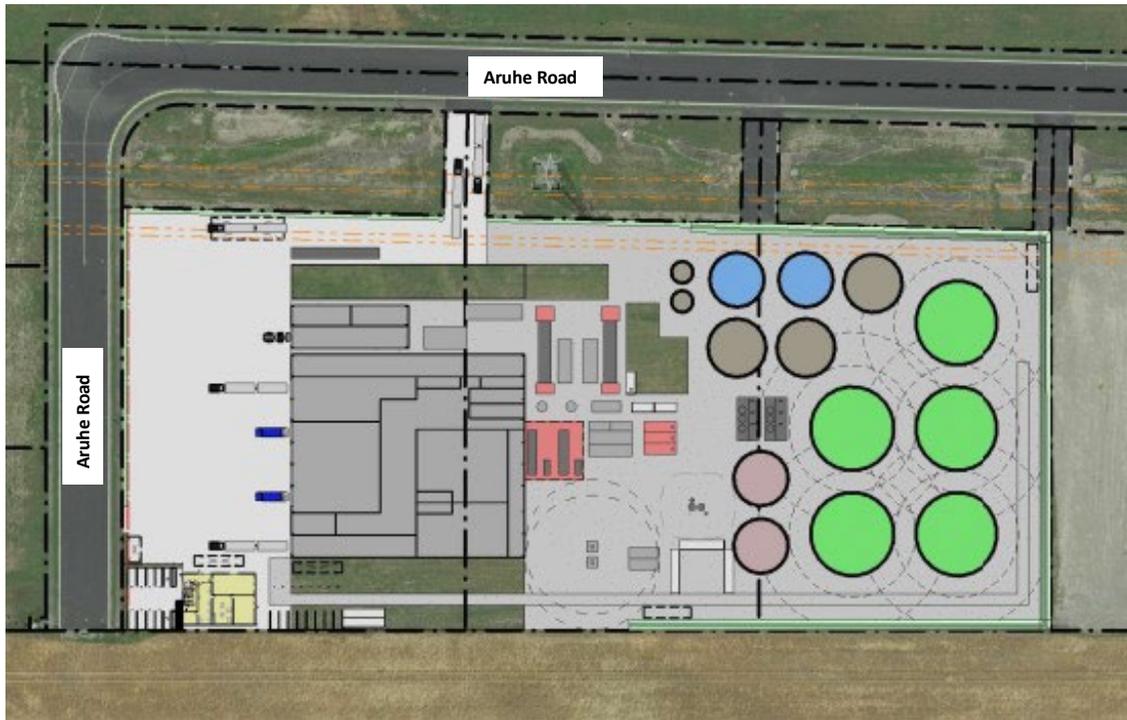
26 APPENDIX

26.1 Location Plan

Ōtautahi Christchurch Ecogas Organics Processing Facility (17-21 Aruhe Road)



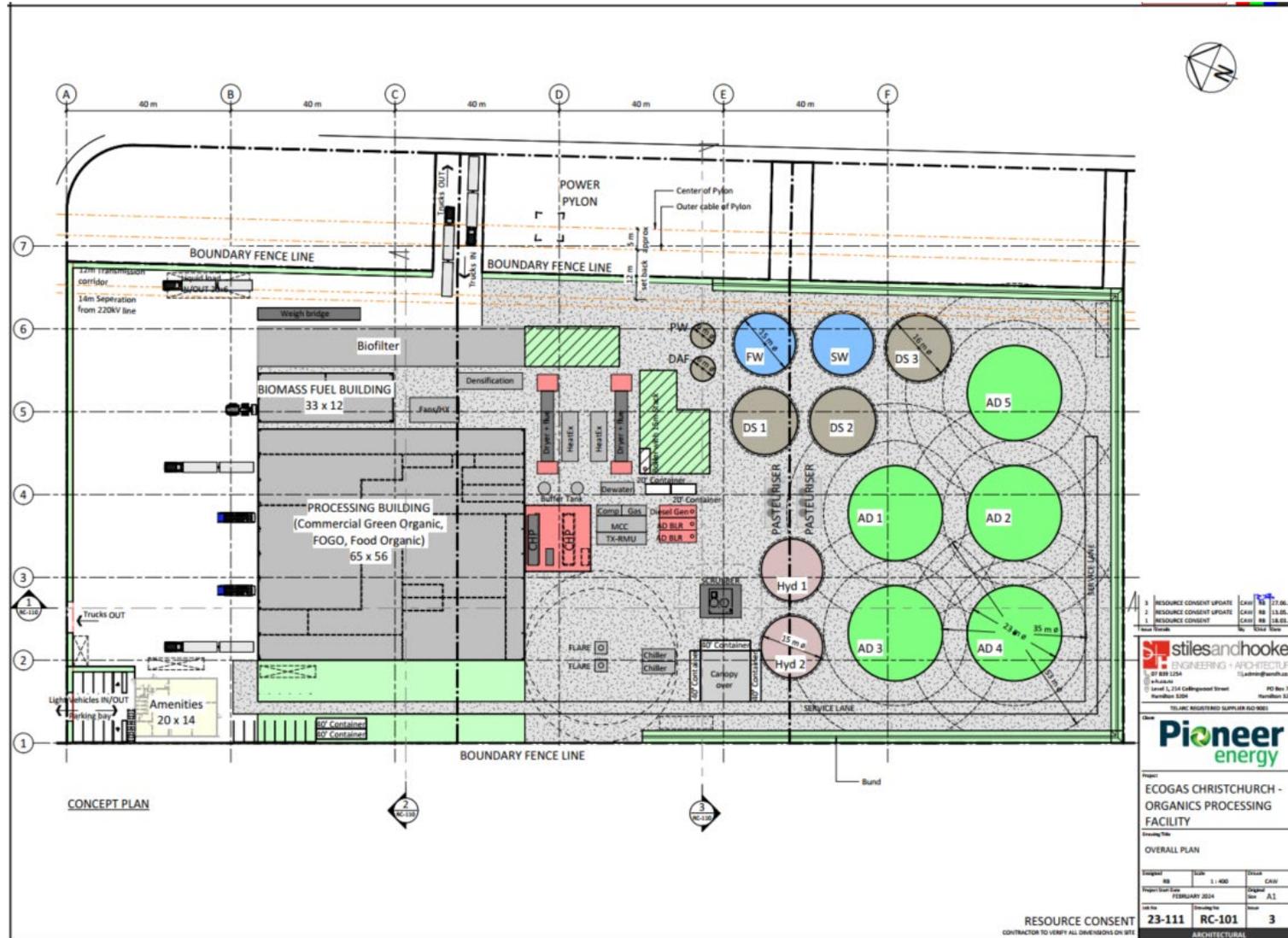
26.2 Site Plan





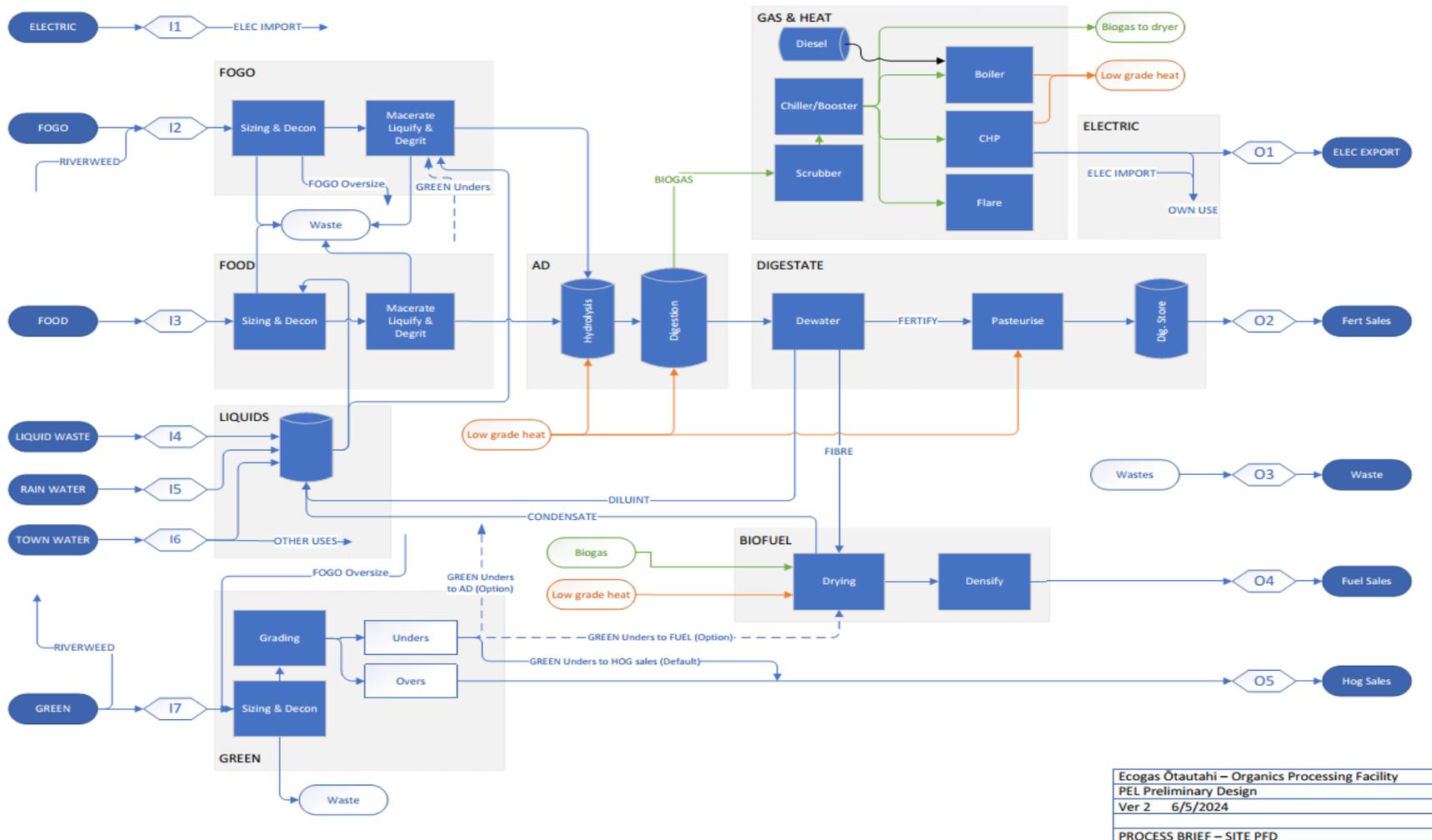
ENVIRONMENTAL MANAGEMENT PLAN

26.3 Site Layout Plan



ENVIRONMENTAL MANAGEMENT PLAN

26.4 Process Flow Diagram



26.5 Preliminary Water Design

To be added when design is finalised.

26.6 Preliminary Drainage and Level Design

To be added when design is finalised.

26.7 Biofilter Design and Management Plan

To be added when design is finalised.



MARSHALL DAY
Acoustics 

**ECOGAS ŌTAUTAHI CHRISTCHURCH
ORGANICS PROCESSING FACILITY
NOISE ASSESSMENT**

Rp 001 R03 20240161 | 2 July 2024

Project: **ECOGAS ŌTAUTAHI CHRISTCHURCH ORGANICS PROCESSING FACILITY**

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Report No.: **Rp 001 R03 20240161**

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Approved	03	Changes to reflect AEE	2 July 2024	G Walton	M Cottle

SUMMARY

Marshall Day Acoustics has undertaken an assessment of noise from the proposed new Ecogas Organics Processing Facility (**OPF**) in Christchurch.

The OPF will be similar to Ecogas' existing facility in Reporoa, Waikato, which we also undertook an assessment for in 2019. We have visited the Reporoa site to obtain noise information for this project, now that it is operational. The Christchurch facility will be larger, with some additional plant and processes that we have had to rely on other noise source data for.

The application site is 17-21 Aruhe Road, Islington, which is within an *Industrial Heavy* zone in the Christchurch District Plan (**CDP**). There are some dwellings north-west and south-west of the site, with the closest of these being approximately 300 metres away. Some of these dwellings are within the *Rural Urban Fringe* zone, with others in the *Industrial General* zone.

Operating hours for the OPF will primarily be from 0600 to 1800 hrs, seven days. However, some processes and extended shifts will operate on a 24/7 basis, including the Anaerobic Digesters and associated plant (or at least they are conservatively assumed to do so for the purposes of this report). There will also be a low number of intermittent heavy vehicle movements through the night as required.

The site will be designed to comply with the noise limits. We have worked with Ecogas on conceptual noise mitigation measures for the development. We expect that with appropriate use of conventional noise control measures the permitted activity standards will be achieved at all adjacent sites.

Existing noise levels at dwellings on Main South Road (SH1) are already elevated and we do not expect noise from the proposed OPF to be audible at this location, particularly as vehicle noise is a key component of the site's noise emissions in this direction.

Rural dwellings on Marshs Road will also receive noise from the site that will comply with the noise standards. During the daytime this is expected to be relatively low and inaudible over other ambient noise. At night, the calculated level of 39 dB L_{Aeq} may be audible outside, although is very unlikely to be audible inside, even with windows open.

We expect that compliance will comfortably be achieved during the construction phase with even the most stringent long-term noise limits, noting the relatively large distances to any noise sensitive receivers.

Overall, we conclude that the proposed OPF is in an appropriate area for the generation of industrial noise and that the facility can operate with acceptable noise effects on the surrounding community.

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1.0 INTRODUCTION

Ecogas Limited Partnership propose to establish a new Organics Processing Facility (**OPF**) in Christchurch. Pioneer Energy Limited will undertake the development on behalf of Ecogas. The OPF will be located in an industrial area and will convert organic feedstocks into fertiliser, biogas and biofuel.

The OPF will be similar to Ecogas' existing facility in Reporoa, Waikato, but with some additional processes in the new plant. Most significantly, the new plant will include buildings for processing fibre from the AD process and commercial green organics.

This report provides details of our assessment, noise measurements and predictions, and a comparison of these levels against applicable local noise standards. Recommendations to limit any potential adverse noise effects from the activity are described where practicable.

A glossary of any technical acoustical terminology used in this report is provided in Appendix A.

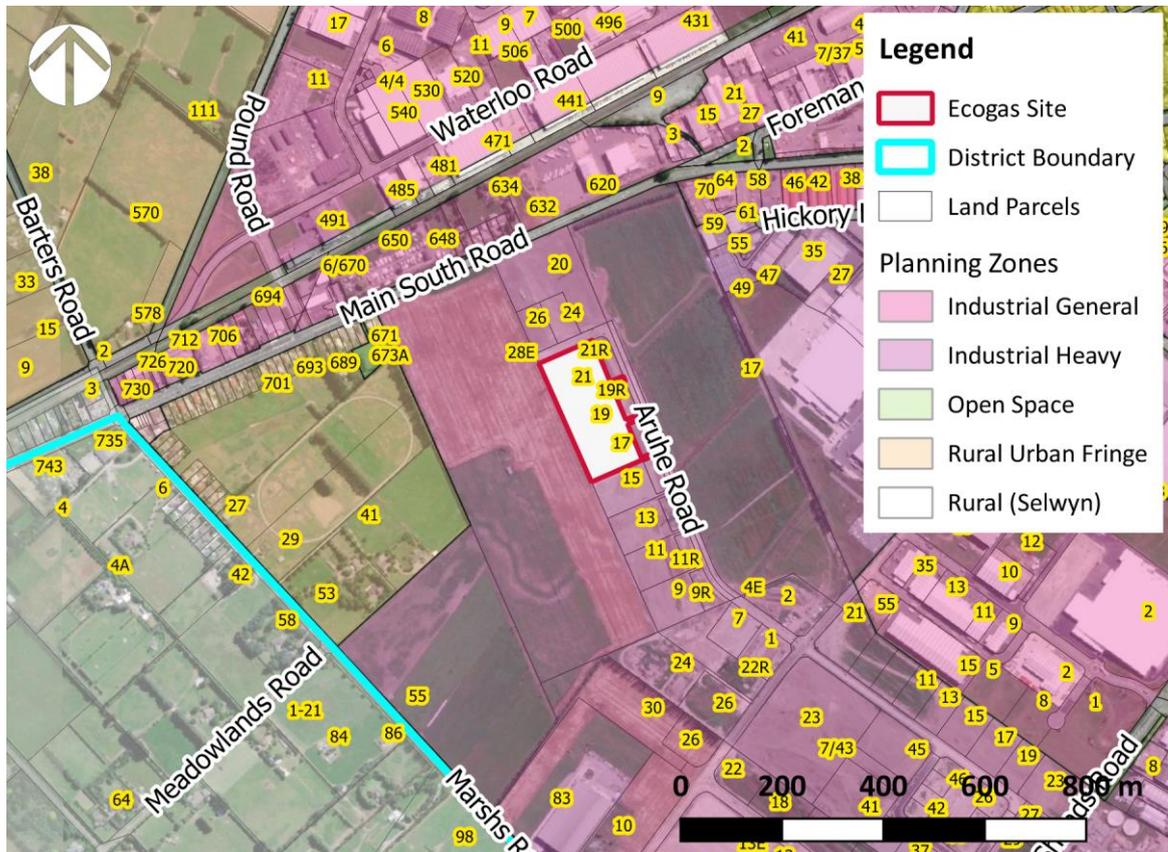
1.1 Application Site and Surrounding Area

The OPF will be located at 17-21 Aruhe Road, Islington (Lots 37-39 DP 572509). This is within a new industrial area that is adjacent to the established industrial precincts on Halswell Junction Road and Main South Road.

Under the Christchurch District Plan (**CDP**), the site and surrounding lots are zoned *Industrial Heavy (IHZ)*, while land on the north side of Main South Road is *Industrial General (IGZ)*. There are a small number of dwellings in the IGZ at 638-648 Main South Road, along with the *Alpine View Holiday Park* at 650 Main South Road.

The area to the south-west is rural, zoned as *Rural Urban Fringe (RuUF)* and, on the far side of Marshs Road, General Rural Zone (**GRUZ**) in the Selwyn District. There are multiple dwellings throughout the rural areas. Figure 1 shows an aerial view of the site and its surrounds.

Figure 1: Aerial image of application site, showing planning zones



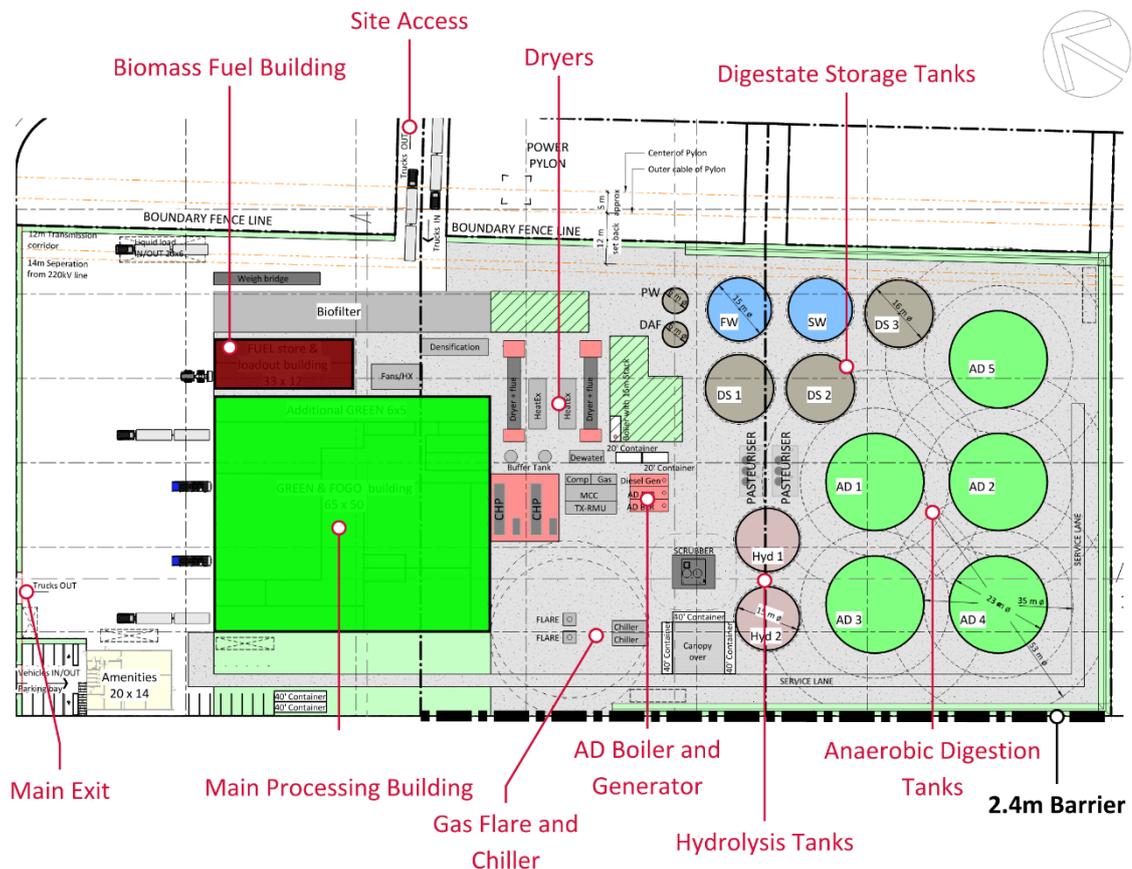
2.0 PROPOSED ACTIVITY DESCRIPTION

The OPF will intake food organic and green organic (FOGO) feedstocks from kerbside collections, commercial food organics and commercial garden organic material, delivered exclusively by road trucks that will enter at the east side of the site. Figure 2 below shows the site layout and some of the key noise sources.

The food and light fraction of the green feedstocks will be processed into a slurry before entering the anaerobic digestion tanks and, after a time, the remaining material is transferred to the digestate storage tanks for distribution.

Fibrous materials from the AD process and some commercial green organics will be further processed and dried to produce biomass fuels, with chippers also being part of the green organic processing.

Figure 2: Indicative site layout plan



In terms of key noise sources, we understand that the following plant is typical for each of the three main processes:

- FOGO processing – load hopper and through shredder, various screens and wet maceration.
- Fibrous materials – separation via a bank of four screw press filters, with material dried through two continuous biomass drying beds and heat exchanger units, with the exhaust ducted straight into the biofilter.
- Green organics – two industrial chipper shredders within enclosed building, conveyor system to storage and some drying.

There are also a number of ancillary processes associated with the operation, including the operation of boilers, generators, tanks, pumps, fans and switchgear. Of note are the gas flares and chillers, plus the use of front end loaders and/or forklifts to move materials around the site.

2.1 Reporoa Noise Levels

While some of the equipment will be bespoke to the Christchurch site, there is significant overlap with the existing Reporoa facility, with which we were also involved in the design and consenting.

We have surveyed noise from equipment operating at the Reporoa site in order to verify our input assumptions for that process and better inform our calculations for the Christchurch proposal.

Included in this survey were:

- Reception building including vehicle movements;
- Biofilters and associated ventilation plant;
- Anaerobic Digester tanks and pumps;
- Combined heat and power (CHP) cogeneration plant;
- Boilers;
- Gas flares and chiller plant; and
- Screw separators.

Noise from these items is discussed further in Section 6 and further details on the noise survey are provided in Appendix B.

2.2 Operating Hours and Vehicle Movements

While the plant will run 24/7, the majority of heavy vehicle movements will be between 0600 and 1800 hrs. Over a typical day, there are expected to be:

- Up to 45 kerbside collection trucks (maximum rate of 20 per hour);
- Up to 10 commercial green organic delivery trucks (or 5 if truck and trailer units);
- 1-3 curtain sider trucks delivering commercial food organics;
- 3-4 trucks delivering liquid feedstocks;
- Between 7 and 13 truck and trailer units for liquid feedstock supply and fertiliser/fuel loadout; and
- A small number of service trucks (e.g. 1-3 vehicles) for rubbish removal or contractor supplies.

This gives a total upper estimate of 78 heavy vehicles per day (i.e. units in and out through the facility, so 156 total movements).

In addition, there will be some light vehicle movements – approximately 10 cars for staff and 10 visitors' vehicles – but these are not significant in terms of our assessment so are not discussed further.

A small number of heavy vehicle movements will also occur at night. The timing of these is likely to vary and we have conservatively assumed a rate of four vehicle movements per hour (i.e. one in every 15 minute period) for our assessment. This is consistent with our assumptions for the Reporoa site.

2.3 Noise Mitigation

There are several key features to the design in terms of noise control:

- Most high noise activities will occur within the processing building, which will have roller doors closed at all times apart from when vehicles are accessing;
- Several higher noise external sources are grouped to the north of the site and/or behind buildings, away from dwellings;

- A 2.4 metre high fence will be provided along a large portion of the south-western boundary (as shown in Figure 2);
- Lower noise level equipment will be selected by Ecogas, who are able to build on their experience from the Reporoa site; and
- Noise control will be provided to specific sources as required to achieve noise limits (e.g. lined steel enclosures around mixing pumps).

We have worked with Ecogas to develop appropriate noise control measures for the project, including a noise budget for higher risk sources. While the noise budget approach typically results in providing limits for emissions from each source, in practice these limits are not absolute as sources can be offset against one another. A holistic approach to noise management is therefore required.

Specific noise controls have been assumed in our calculations for the following sources:

- Mix pumps for Anaerobic Digestate and Hydrolysis tanks;
- Dryer/blower/heat exchanger units;
- Dryer exhaust ducting to biofilters;
- Green organics shredders; and
- Densification plant.

The noise budget for these sources is discussed later in this report. While the specific noise control design details for each source are not known at this stage, we expect the noise control targets to be achievable in our experience.

Selecting lower noise level plant will be necessary in some cases, while others may need conventional noise control measures such as enclosures or attenuators to meet the targets.

An acoustic design review will be undertaken prior to construction to verify that the final design achieves the required specifications, with particular emphasis on the items listed above.

While we have recommended a 2.4 metre high solid barrier along the majority of the south-western site boundary of the site – as shown in Figure 2, we note the benefit of this barrier could ultimately be superseded if other industrial activities establish on the intervening land and erect structures that provide screening for the site.

3.0 EXISTING NOISE ENVIRONMENT

The application site is in an area that is already subject to noise from multiple sources. Most significant is traffic noise, with State Highway 1 (SH1) around 400 metres to the north and State Highway 76 around 1 km to the south. Noise from other industrial sites is also a feature, plus aircraft overflights, noting the site lies just outside of the Christchurch airport noise contours.

We visited the application site on 14 March 2024 to measure existing levels of noise in the surrounding area. Table 1 summarises the results of our survey. The survey locations are shown below in Figure 3.

Table 1: Summary of measured noise levels

Location	Time	Measured Noise Level, dB			Comments and Observations
		L _{Aeq}	L _{A90}	L _{AFmax}	
MP1	11:27	53	51	62	Significant traffic noise. Lawn mower and birdsong also audible at times.
	13:32	53	50	63	
MP2	11:42	73	59	88	Significant and continuous traffic noise dominates.
	13:54	73	60	83	
MP3	12:09	51	49	56	Distant vehicle noise and natural sounds. One car pass in second measurement.
	14:05	52	45	74	
MP4	12:30	59	45	77	Industrial activity and associated vehicles, both on-site and on road.
	14:21	56	46	73	

Figure 3: Noise survey locations



4.0 NOISE STANDARDS AND GUIDELINES

4.1 Local Authority Regulations

4.1.1 Christchurch District Plan

Rule 6.1.5.1.1 of the CDP states that any activity (that is not otherwise exempt from the rules) is permitted with respect to noise if it meets the zone noise limits given in Rule 6.1.5.2.1 outside the central city. The relevant zone noise limits are given in Table 1.

Table 2: Zone noise limits (excerpt from Table 1, Rule 6.1.5.2.1)

Zone of site receiving noise from the activity	0700 - 2200 hrs		2200 - 0700 hrs	
	dB LAeq	dB LAfmax	dB LAeq	dB LAfmax
b. All rural zones, except Rural Quarry Zone, assessed at any point within a notional boundary	50	-	40	65
e. All commercial zones	55	-	45	70
f. All open space zones				
g. All rural zones, except Rural Quarry Zone, assessed at the site boundary				
l. Industrial General Zone*	70	-	70	-
n. Industrial Heavy Zone*	75	-	75	-

* Except that noise levels shall not exceed 50 dB LAeq or 75 dB LAmax between 2200 and 0700 at any residential unit lawfully established prior to 6 March 2017.

We note that the footnote to the table does apply in this case as there are dwellings within the Industrial General Zone along Main South Road. These rules apply at the boundary of any site receiving noise from the activity. Where activities exceed the permitted activity standards above, the following apply:

- Activities exceeding by 10 dB or less shall have restricted discretionary status (Rule 6.1.5.1.3).
- Any activity listed in Rule 6.1.5.1.1 P2 that does not meet one or more of the activity specific standards; or not otherwise provided for as a permitted, restricted discretionary or non-complying activity, is discretionary with respect to noise (Rule 6.1.5.1.4).
- Activities exceeding by more than 10 dB are non-complying with respect to noise (Rule 6.1.5.1.5).

Rule 6.1.4.1 requires that, unless otherwise specified, noise should be measured in accordance with New Zealand Standard NZS 6801:2008 "Acoustics – Measurement of environmental sound" and assessed in accordance with New Zealand Standard NZS 6802:2008 "Acoustics - Environmental Noise" (except that provisions referring to Special Audible Characteristics shall not be applied).

4.1.2 Cross-Boundary Issues and the Selwyn District Plan

As described above, the zone boundary with the Selwyn District lies south-west of Marshs Road. The CDP does not provide any guidance on the application of noise limits at district boundaries. While the Selwyn rules do not technically apply to this activity, we have considered the relevant noise standards to establish the anticipated environment in this area.

The relevant Selwyn noise limits¹ are 55 dB LAeq daytime and 45 dB LAeq at night, at the notional boundary of dwellings. These are 5 dB higher than the Christchurch notional boundary limits, which suggests that a lower standard of rural amenity is anticipated in this area.

¹ Partially Operative Selwyn District Plan (Appeals Version), GRUZ noise limits (Rule NOISE-REQ1 – Table 5).

4.2 Construction Noise Limits

The CDP also has requirements for construction noise in Rule 6.1.6.1.1.P2, which states that *'Construction activities shall meet relevant noise limits in Tables 2 and 3 of NZS 6803:1999 Acoustics - Construction Noise, when measured and assessed in accordance with that standard'*. These tables are reproduced for reference in Appendix C.

The key noise limits are 70 dB L_{Aeq} and 85 dB L_{AFmax} for long-term duration construction projects. These are the most restrictive noise limits given in the Standard for the daytime period (0730 to 1800 hrs, weekdays and Saturdays). Works that occur between 0630 and 0730 hrs are subject to lower noise limits of 55 dB L_{Aeq} and 75 dB L_{AFmax} .

Construction noise is discussed further in the following section.

5.0 CONSTRUCTION NOISE ASSESSMENT

While the exact construction methodology is not known at this stage, it is likely that activities such as the following will be required:

1. Ground improvement works – bulk earthworks using heavy machinery to cut, fill and compact soils as required.
2. Foundation works – excavation and concrete pouring (we understand that no piles will be required).
3. Building construction – finishing floor slabs, erection of precast wall components, structural steel work and cladding.
4. Equipment installation – construction of tank and equipment foundations, erection of panellised steel tanks, pipework fabrication, install of ancillary plant and process connections.
5. Final works – building fitout, equipment commissioning, drainage, sealing, fencing, etc.

Using conventional construction plant, we expect that compliance will comfortably be achieved with even the most stringent long-term noise limit (70 dB L_{Aeq} during the day), noting the relatively large distances to any noise sensitive receivers.

Figure 4 overleaf provides predicted noise levels for some of the typical tools and machinery that would be used for the tasks above. The closest occupied industrial buildings are on the order of 250 metres from the OPF site, while the closest residential buildings are over 300 metres away.

The calculations show that most items are achieving the 70 dB L_{Aeq} long-term daytime limit beyond 100 metres distance. Factoring in cumulative noise – multiple items working at once – compliance will still comfortably be achieved at distances beyond 150 metres.

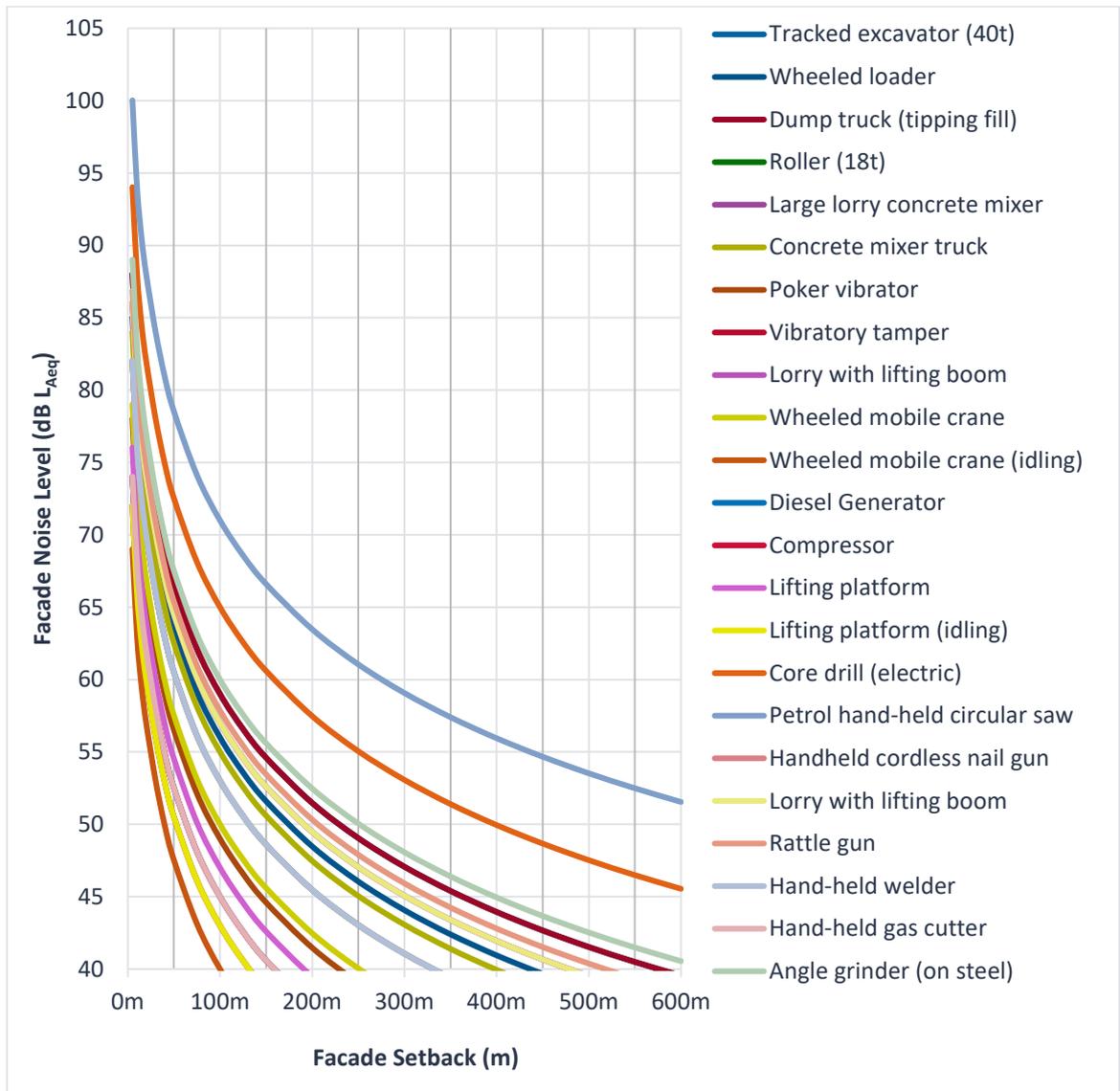
Early morning works are also likely if the project has a short construction timeline. The 55 dB L_{Aeq} long-term noise limit for the early morning period (0630 to 0730 hrs) will be achieved by most activities beyond 150 metres from the site. On a cumulative basis, compliance at the closest residential receivers should be comfortably achieved.

Prior to 0630 hrs, a 45 dB L_{Aeq} noise limit applies for long-term works. This would likely preclude any high noise activities on site, but the site could open and preparatory activities commence before this time.

We note that these calculations do not allow for any barrier attenuation from temporary screens or other structures. Once structures are erected on site, these will provide screening in some directions, thus meaning that noise emissions are lower still.

If the construction timeframe is compressed into fewer than 20 weeks (approximately 5 months) then the noise limits will be 5 dB less restrictive than those above (except at night).

Figure 4: Noise levels from typical construction plant and activities



6.0 OPERATIONAL NOISE LEVELS

We have developed a noise model of the site to calculate operational noise emissions. The following scenarios were tested:

1. Daytime – all fixed plant running, peak vehicle movements (20 kerbside collection vehicles per hour and one each of other heavy vehicle types per hour)
2. Night-time – all external fixed plant running, no activity within the processing building, minimum vehicle movements (4 vph)

These scenarios both give a conservative estimate of noise produced in each period. Levels of activity will vary during the day and we have focussed on the period with the highest rate of vehicle movements. At night, it is unlikely that all plant will be operating continuously, and the low number of truck movements means that there will in practice be extended periods with no vehicle activity.

While doors will in practice remain closed at all times for odour control, our model assumes that all doors are open at all times, thus resulting in the highest levels of noise breakout from buildings. This conservative assumption avoids the need to make estimates on the sound insulation properties of the doors and the amount of time that they remain open for.

6.1 Modelling Methodology

Computer noise modelling was undertaken using the SoundPLAN v9.0 suite of noise modelling software. This software implements calculation procedures described in International Standard ISO 9613-2:1996 “Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation” that assume ‘positive’ (i.e. worst-case) propagation conditions such as moderate downwind (from source to receiver) or under a temperature inversion.

Our modelling is based on the following assumptions:

- Flat topography throughout;
- Hard ground absorption ($G=0.0$) for the subject site and adjacent industrial and residential zones;
- Mixed ground absorption ($G=0.5$) elsewhere and soft ground ($G=1.0$) for paddocks; and
- No acoustic screening or shielding from buildings, barriers or bunds outside of the site (i.e. on other properties) has been allowed for.

In terms of screening within the site, in addition to the 2.4m high barrier, we understand that a <1 metre high bund will be installed around a portion of the site for accidental spill containment purposes. This has been included in our model at a uniform height of 0.5 metres.

6.2 Source Levels

Noise source levels used in our assessment are provided in Appendix B. These are based on the equipment measured at Reporoa where possible. However, the Christchurch OPF has some items of plant that are not at Reporoa.

Where we do not have directly measured data, we have used manufacturer’s data where available, or otherwise from similar items in our own noise source database or estimated from first-principles calculations.

It is important to note that our modelling is particularly conservative because:

- Actual noise levels generated by proprietary equipment (such as the containerised dryers) will not be known until it is commissioned, so worst-case estimates have been used.
- Ecogas will endeavour to select lower noise level plant for some items compared with their Reporoa equivalents on which our calculations are based.

6.3 Calculated Noise Levels

Table 3 provides the noise levels at receiving locations around the site. The predicted levels are also compared with the applicable noise limits for each zone. Compliance with the noise limits is achieved at all locations, based on the design achieving the noise budgets set out in this report.

Table 3: Calculated noise levels (dB L_{Aeq}) at local receivers

Address	Receiver Zone	Day			Night		
		Level	Limit	Status	Level	Limit	Status
41 Marshs Road (Not. Bdy.) <i>Site boundary</i>	RuUF	45	50	-5	40	40	0
		49	55	-6	43	45	-2
671 Main South Road	RuUF	50	50	0	38	40	-3
689 Main South Road	RuUF	48	50	-2	37	40	-3
634 Main South Road	IG	58	70	-12	43	70	-27
636 Main South Road	IG	58	70	-12	43	70	-28
638 Main South Road	IG	58	70	-12	42	70	-28
640 Main South Road	IG	58	70	-12	43	70	-27
642 Main South Road	IG	58	70	-12	42	70	-28
644 Main South Road	IG	57	70	-13	41	70	-29
648 Main South Road	IG	57	70	-13	41	70	-29
49 Hickory Place	IH	57	75	-18	50	75	-25
17 Hickory Place	IH	69	75	-7	65	75	-11
26 Aruhe Road	IH	72	75	-3	57	75	-18
24 Aruhe Road	IH	71	75	-4	58	75	-17
15 Aruhe Road	IH	55	75	-20	55	75	-20
661 Main South Road	IH	67	75	-8	53	75	-22
Islington Reserve	OCP	50	55	-5	39	45	-6

6.3.1 Predicted Maximum Noise Levels

We have also considered the effects of short duration noise events that can affect the maximum (L_{AFmax}) noise level, which is of particular importance at night as there is a limit for some zones.

Most of the plant that operates continuously will emit steady levels of sound that do not appreciably vary over time. Noise from vehicle movements has the greatest potential to generate impulsive noise level events that would be assessed against the L_{max} limits.

We expect that noise levels from vehicles accessing the site (including moderate body noise etc) will remain below 60 dB L_{AFmax} at all times. Noise from other potentially impulsive sources such as truck unloading and green organic shredding is expected to be lower than that from vehicles outside as these activities take place within buildings and are well screened from the closest residential receivers.

6.4 Noise Effects Assessment

Noise levels will be designed to comply with the noise standards at all receiver locations during day and night. Potential noise effects associated with the estimated noise levels received in specific receiving areas are discussed further below.

6.4.1 Main South Road (SH1) Dwellings

At dwellings along Main South Road, noise from peak hour vehicle movements is one of the main factors that influence predicted noise levels of around 50 dB L_{Aeq} . The ambient noise environment in this area is already governed by road traffic on Main South Road and noise levels are well above the CDP standard. Noise from the proposed activity is not expected to be audible in this environment.

Main South Road carries a relatively high volume of traffic even at night, so will continue to be a significant influence on night-time noise levels in this area. Night-time noise levels at 671 and 689 Main South Road are predicted to be 38 and 37 dB L_{Aeq} respectively. These noise levels are mainly influenced by trucks that are assumed to access the site during the night and will be at a much lower level than noise from other vehicles on Main South Road.

6.4.2 Marshs Road Dwellings

The closest dwelling south-west of the site is 41 Marshs Road, which is approximately 400 metres from the plant. Although some Main South Road dwellings are closer to the site, this property is likely to be more sensitive to noise given the lower background noise environment (increased separation distance from Main South Road).

Daytime noise levels are expected to comfortably comply. Predicted noise levels at this location are influenced by noise breakout from the processing buildings. Given that our model assumes all doors remain open, this gives assurance that actual noise emissions are likely to be lower in practice.

Night-time noise emissions also comply with the limit, with external plant associated with the storage and processing tanks having the highest influence on noise at this property.

We do not have night-time ambient noise measurements at this property, but do not expect that the existing ambient noise levels would be sufficiently high to mask noise from the site by any significant margin. While compliant, noise levels may be audible outside at night, however are very unlikely to be audible inside with windows closed.

The block of land between these two properties (661 Main South Road) is also zoned *Industrial Heavy*. Any industrial activity that establishes on this site may provide additional screening from erecting intervening structures and/or may introduce other sources of industrial noise that could further mask noise sources associated with the OPF. Our assessment does not rely on this factor, but this point is noted for completeness, as it may influence future noise effects.

6.4.3 Islington Reserve

The Council-owned reserve is a similar environment to the Main South Road dwellings in that it is heavily influenced by traffic noise. Predicted noise levels comfortably comply with the 55 dB L_{Aeq} daytime noise standard and are not expected to result in any adverse effects for users of the park. Noise emissions will likely be inaudible over local traffic noise for the majority of the time.

While the reserve is not expected to be occupied during the night, the predicted noise limits in Table 3 demonstrate that at the reserve the 45 dB L_{Aeq} night-time noise standard will be met nonetheless.

6.4.4 Industrial Zone Land

Predicted noise levels comfortably comply with the limits at all adjacent industrial zoned sites. Consequently, we do not anticipate any adverse effects would arise. Given the nature of the zone we anticipate that additional sources of noise will also be present once all of the neighbouring industrial sites are fully developed.

7.0 CONCLUSIONS

Overall, we expect that an OPF can operate at the proposed location with acceptable noise effects and will comply with the noise standards in the CDP with the mitigation proposed. The exact specifications for some of the noise control measures will be developed further in the detailed design phase, but we anticipate that this will be readily achievable with conventional engineering measures.

Ecogas already have experience in the design and construction of a similar facility in Reporoa. We expect that the learnings from this site – further informed by the additional noise measurements that we have obtained – will provide a good basis for the design of the proposed new facility.

We consider that this area is an appropriate setting for noise from such an activity, noting the *Industrial Heavy* zoning of the site and the presence of other sources of noise – both in the form of other industrial units and transport infrastructure noise. Noise emissions from the activity that achieve the permitted activity standards in the District Plan are considered appropriate in this environment.

APPENDIX A GLOSSARY OF TERMINOLOGY

A-weighting	A set of frequency-dependent sound level adjustments that are used to better represent how humans hear sounds. Humans are less sensitive to low and very high frequency sounds. Sound levels using an “A” frequency weighting are expressed as dB L_A . Alternative ways of expressing A-weighted decibels are dBA or dB(A).
Background sound	The sound that is continuously present in a room or outdoor location. Often expressed as the A-weighted sound level exceeded for 90 % of a given time period i.e. L_{A90} .
dB	Decibel. The unit of sound level.
Emission	Sound that is generated by, and propagates away from a source.
L_{A90}	The A-weighted sound level exceeded for 90 % of the measurement period, measured in dB. Commonly referred to as the background noise level.
L_{AE}	Exposure Level. An A-weighted measure of the total sound energy over a certain time period, compressed into 1 second. Used to describe the sound energy of a single event, such as a train pass-by or an aircraft flyover.
L_{Aeq}	The equivalent continuous A-weighted sound level. Commonly referred to as the average sound level and is measured in dB.
L_{Amax}	The A-weighted maximum sound level. The highest sound level which occurs during the measurement period. Usually measured with a fast time-weighting i.e. L_{AFmax}
L_p	Sound pressure level. The sound level measured at distance from a source. Distinctly different from sound power level (L_w)
L_w	Sound Power Level. The calculated level of total sound power radiated by a sound source. Usually A-weighted i.e. L_{WA} .
Notional boundary (NB)	A line 20 metres from any side of a dwelling, or the legal boundary where this is closer to the dwelling. This definition is from NZS 6802:2008.

APPENDIX B NOISE SOURCE LEVELS

The following noise sources are included in the model. Items subject to a design budget are shown in bold.

Source	Quantity	Location	dB L _{WA}	Data Source
AD Heat exchange pump	5	External	90	Budget (reduced from Reporoa)
AD Mixing pump	10	External	90	Budget (reduced from Reporoa)
AD Boiler stack	1	External	74	Reporoa
AD Boiler	1	External	93	Reporoa
Biofilter Supply Duct	1	External	98	Budget (reduced from Reporoa)
Briquetting Plant	1	External	100	Estimate from MDA database
CHP Generators	2	External	97	Reporoa
CHP Hot Water System	2	External	98	Reporoa
Chiller	2	External	89	Reporoa
DAF Blower	1	External	96	Reporoa
DAF Mixing pump	1	External	101	Reporoa
Dewater pump	1	External	94	Reporoa
Diesel Generator	1	External	97	Estimate from MDA database
DS Mixing pump	3	External	101	Reporoa
DS Blower	3	External	86	Reporoa
Gas Feed Pipes	2	External	85	Reporoa
Flare exhaust	2	External	95	Reporoa
Flare stack and vents	2	External	88	Reporoa
FlowDrya Container	2	External	99	Budget (estimate from MDA database)
FlowDrya Fan/HX Unit	3	External	100	Budget (fan volume estimate, reduced)
HYD Mixing Pump	4	External	90	Budget (reduced from Reporoa)
Pasteuriser Boiler stack	2	External	74	Reporoa
Pasteuriser Boiler	2	External	90	Reporoa
Pasteuriser HW Pump	2	External	87	Reporoa
Pasteuriser Main Pump	2	External	96	Reporoa
Liquid Feed/PW Blower	1	External	96	Reporoa
Liquid Feed/PW Mixing Pump	1	External	101	Reporoa
Scrubber Blower	1	External	96	Reporoa
Scrubber Pump	2	External	86	Reporoa
Separator Air Pressure Regul.	4	External	73	Reporoa
Separator Pump	4	External	72	Reporoa
SW Pump	2	External	86	Reporoa
WF Boiler Stack	1	External	74	Reporoa
WF Boiler	1	External	101	Reporoa
Air Separator	1	Internal	84	Manufacturer's data
Disc Separator	1	Internal	103	Reporoa
FOGO Shredder	1	Internal	113	Estimate from MDA database
Green Dryer	1	Internal	99	Estimate from MDA database
Green Shredder	2	Internal	113	Estimate from MDA database
Wet maceration pump	2	Internal	91	Reporoa
Wheeled Loader (large)	1	Internal	110	Estimate from MDA database
Wheeled Loader (medium)	1	Internal	107	Estimate from MDA database

APPENDIX C NZS 6803 CONSTRUCTION NOISE LIMITS

The following text is reproduced from New Zealand Standard NZS 6803: 1999 “Acoustics - Construction Noise”.

Residential zones and dwellings in rural areas:

Table 2 – Recommended upper limits for construction noise received in residential zones and dwellings in rural areas

Time of week	Time period	Duration of work					
		Typical duration (14 days to 20 weeks), dBA		Short-term duration (< 14 days), dBA		Long-term duration (> 20 weeks), dBA	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
Weekdays	0630-0730	60	75	65	75	55	75
	0730-1800	75	90	80	95	70	85
	1800-2000	70	85	75	90	65	80
	2000-0630	45	75	45	75	45	75
Saturdays	0630-0730	45	75	45	75	45	75
	0730-1800	75	90	80	95	70	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75
Sundays and public holidays	0630-0730	45	75	45	75	45	75
	0730-1800	55	85	55	85	55	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75

Industrial or commercial areas:

Table 3 – Recommended upper limits for construction noise received in industrial or commercial areas for all days of the year

Time period	Duration of work		
	Typical duration	Short-term duration	Long-term duration
	L_{eq} (dBA)	L_{eq} (dBA)	L_{eq} (dBA)
0730-1800	75	80	70
1800-0730	80	85	75

Notes in the standards to the tables above:

7.2.5

The night time limits in Table 2 shall apply to activities carried out in industrial or commercial areas where it is necessary to prevent sleep interference, specifically where there are residential activities, hospitals, hotels, hostels, or other accommodation facilities located within commercial areas. The limits in Table 2 may also be used to protect other specific noise sensitive activities at certain hours of the day.



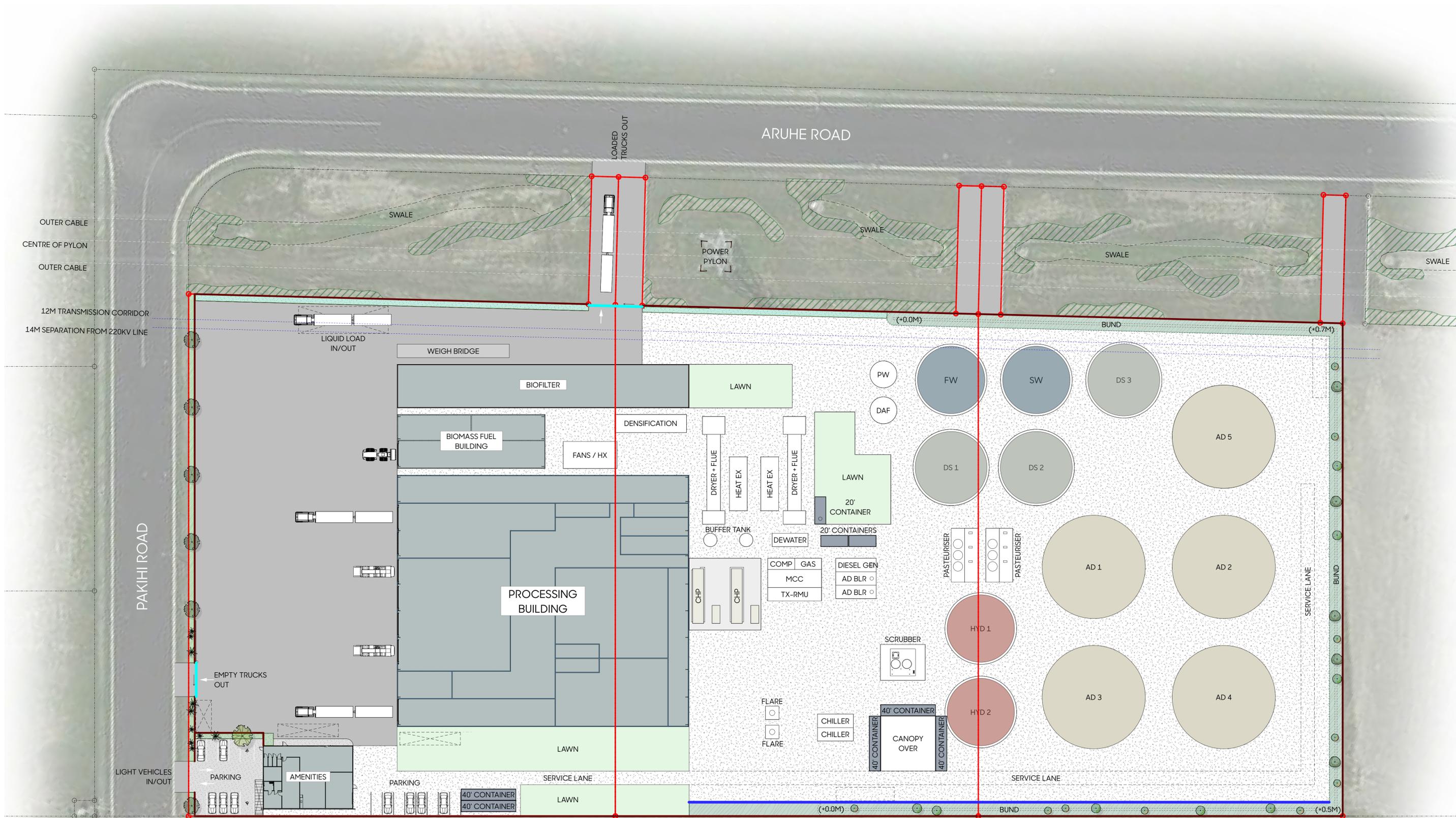
Resource Consent Landscape Package for

Pioneer Energy Ltd.

Ecogas, Ōtautahi Organics Processing Facility,
17-21 Aruhe Road, Christchurch

Drawing Number:	Drawing Description:	Drawing Issue Date:
1975/01	- General Arrangement Plan	2/07/24
1975/02	- Planting Plan North	2/07/24
1975/03	- Planting Plan South	2/07/24
1975/04	- Plant Palette 1	2/07/24
1975/05	- Plant Palette 2 & Planting Detail	2/07/24

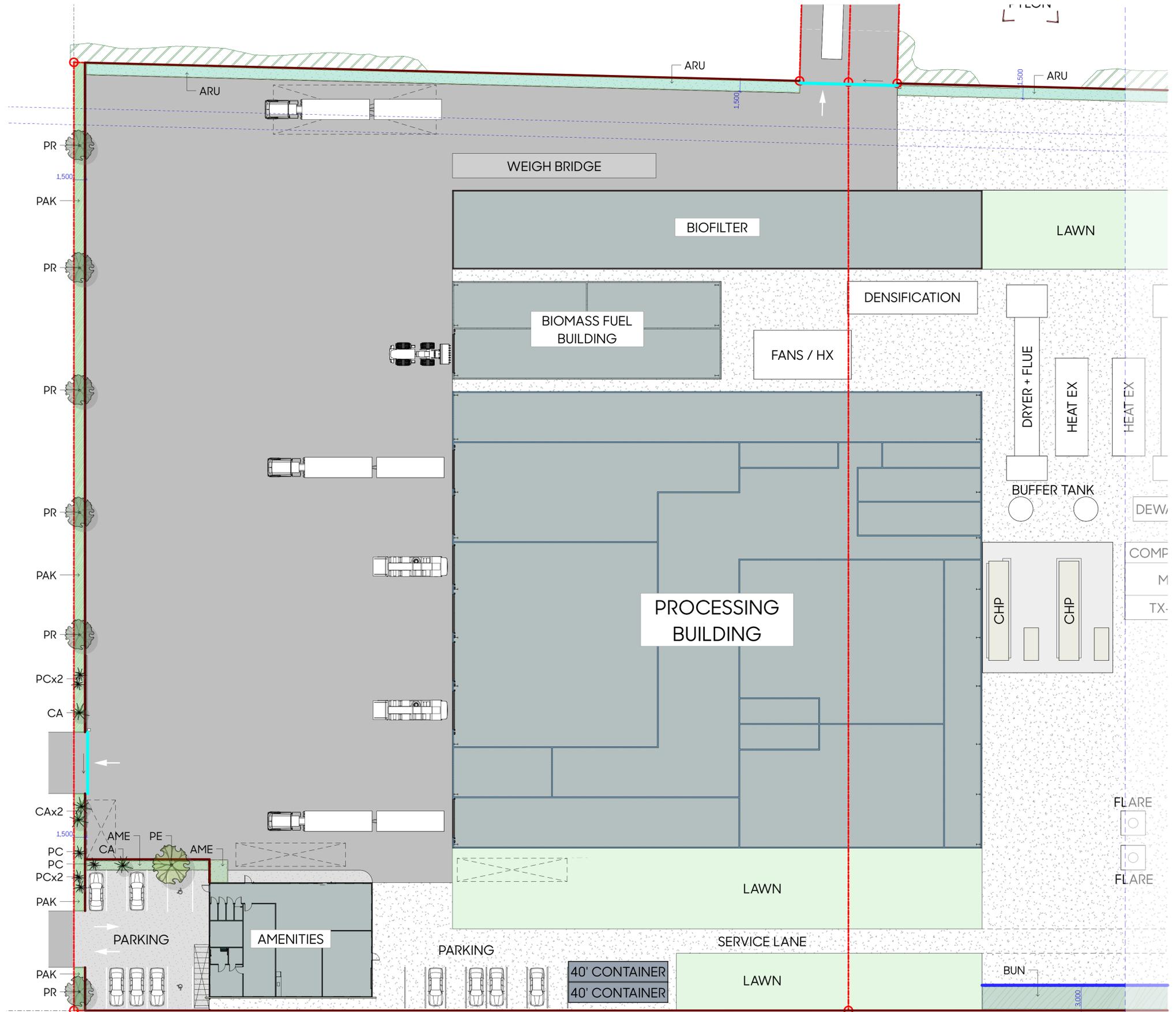
greenwoodassociates.co.nz



- | | | | | | | | | | |
|--|-----------------------|--|--------------------|--|-------------------------|--|---------------------|--|-------------------------|
| | Trees above 6m | | Pakahi native mix | | Aruhe native mix | | Hard surface type 1 | | Automatic sliding gates |
| | Trees under 6m | | Amenity native mix | | Existing swale planting | | Hard surface type 2 | | Fencing (3m wire mesh) |
| | Narrow Accent Species | | Bund native mix | | Lawn | | Hard surface type 3 | | Acoustic fence |



Code	Name	Common Name	Grade	Spacing	Height
Trees Above 6m					
PE	<i>Pittosporum eugenioides</i>	Tarata / Lemonwood	45L/PB95	as marked	8m
PR	<i>Plagianthus regius</i>	Mānatu / Lowland Ribbonwood	45L/PB95	as marked	10m
Trees Under 6m					
CC	<i>Caprosma crassifolia</i>	Thick-leaved Mikimiki	8L/PB12	as marked	4m
GL	<i>Griselinia littoralis</i>	Kāpuka / Broadleaf	8L/PB12	as marked	6m
HA	<i>Hoheria angustifolia</i>	Hungere / Narrow-leaved Lacebark	8L/PB12	as marked	6m
Narrow Accent Species					
CA	<i>Coriaria australis</i>	Ti Kōuka	8L/PB12	as marked	8m
PC	<i>Pseudopanax crassifolius</i>	Horoeka / Lancewood	8L/PB12	as marked	6m
Aruhe Native Mix (ARU) 178m²					
40%	<i>Festuca novae zelandiae</i>	Hard Tussock	RX90	750mm	0.7m
20%	<i>Poa cita</i>	Silver Tussock	RX90	750mm	0.7m
15%	<i>Muehlenbeckia astonii</i>	Shrub Pohuehue	RX90	750mm	1.8m
10%	<i>Dianella nigra</i>	Tūrutu	RX90	750mm	0.5m
10%	<i>Olearia adenocarpa</i>	Canterbury Plains Tree Daisy	RX90	750mm	1.5m
5%	<i>Sophora prostrata</i>	Dwarf Kōwhai	RX90	750mm	1.8m
Pakihī Native Mix (PAK) 121m²					
40%	<i>Festuca novae zelandiae</i>	Hard Tussock	RX90	750mm	0.7m
25%	<i>Caprosma acerosa</i>	Sand Caprosma	RX90	750mm	0.3m
10%	<i>Dianella nigra</i>	Tūrutu	RX90	750mm	0.5m
10%	<i>Muehlenbeckia axillaris</i>	Pohuehue	RX90	750mm	0.2m
10%	<i>Veronica odora</i>	Boxwood Hebe	RX90	750mm	1.2m
5%	<i>Meliccytus alpinus</i>	Porcupine Bush	RX90	750mm	0.8m
Amenity Native Mix (AME) 21m²					
50%	<i>Phormium 'Green Dwarf'</i>	Dwarf Flax	2L/PB3	850mm	1.5m
30%	<i>Caprosma acerosa</i>	Sand Caprosma	2L/PB3	850mm	0.3m
20%	<i>Veronica odora</i>	Koromiko / Hebe	2L/PB3	850mm	1.2m
Bund Native Mix (BUN) 967m²					
20%	<i>Corokia cotoneaster</i>	Korokio	3L/PB5	1500mm	2.5m
20%	<i>Muehlenbeckia astonii</i>	Shrub Pohuehue	3L/PB5	1500mm	1.75m
20%	<i>Ozothamnus leptophyllus</i>	Tauhīnu	3L/PB5	1500mm	1.75m
15%	<i>Veronica salicifolia</i>	Koromiko	3L/PB5	1500mm	2.0m
10%	<i>Austroderia richardii</i>	South Island Toe Toe	3L/PB5	1500mm	2.0m
10%	<i>Olearia adenocarpa</i>	Small-leaved Tree Daisy	3L/PB5	1500mm	1.5m
5%	<i>Teucrium parvifolium</i>	Teucrium	3L/PB5	1500mm	1.5m



PLANTING PLAN
NORTH
PLAN
SOUTH

Client
Pioneer Energy Ltd.

Project
Ecogas, Ōtautahi Organics Processing Facility,
17-21 Aruhe Road, Christchurch

Drawing
1975/02 Planting Plan North

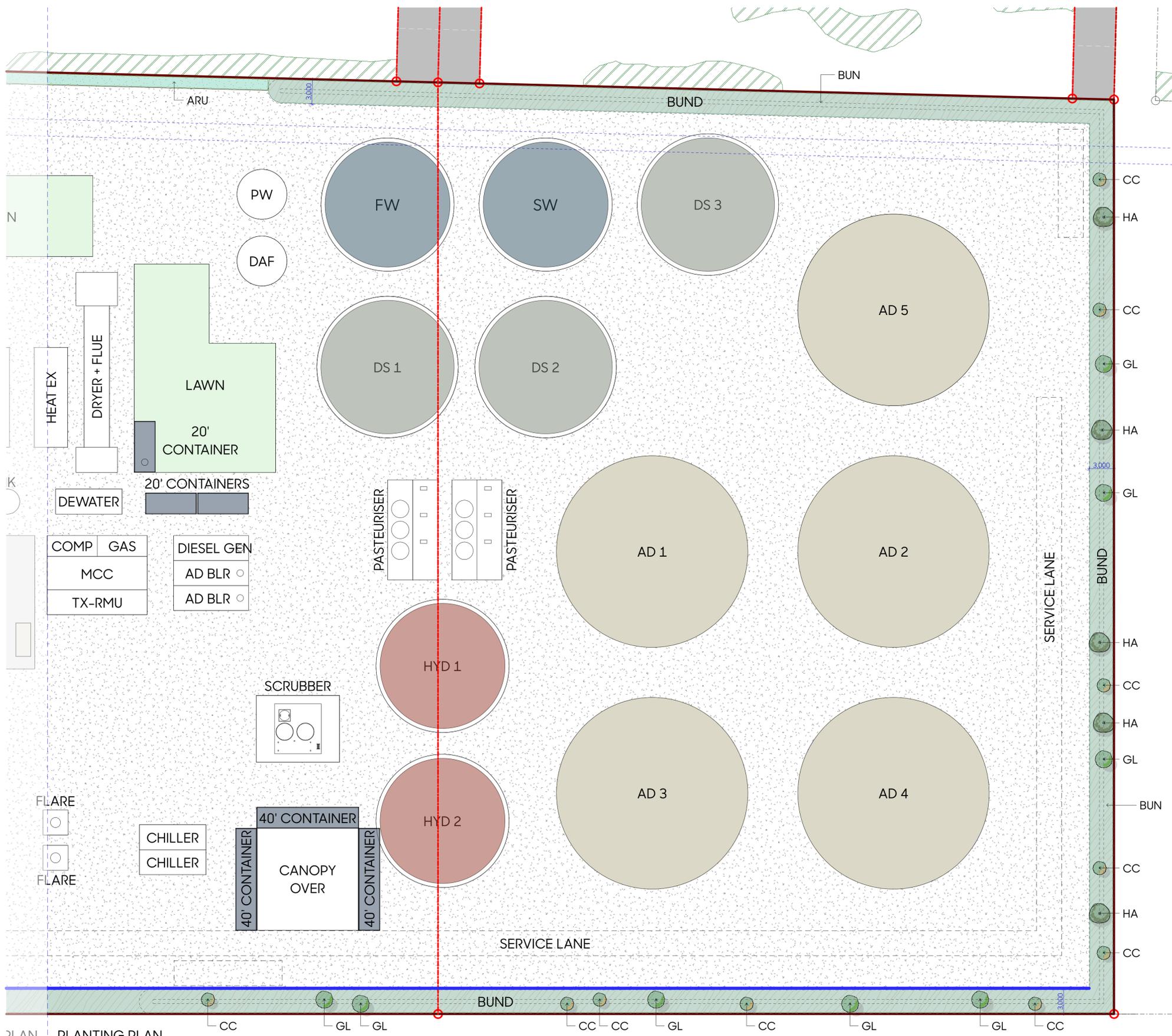


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Issue Date
2/07/24
Issue
RC

Drawn
AT
Checked
CC





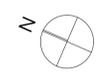
Code	Name	Common Name	Grade	Spacing	Height
Trees Above 6m					
PE	<i>Pittosporum eugenioides</i>	Tarata / Lemonwood	45L/PB95	as marked	8m
PR	<i>Plagianthus regius</i>	Mānatu / Lowland Ribbonwood	45L/PB95	as marked	10m
Trees Under 6m					
CC	<i>Coprosma crassifolia</i>	Thick-leaved Mikimiki	8L/PB12	as marked	4m
GL	<i>Griselinia littoralis</i>	Kāpuka / Broadleaf	8L/PB12	as marked	6m
HA	<i>Haeria angustifolia</i>	Hungere / Narrow-leaved Lacebark	8L/PB12	as marked	6m
Narrow Accent Species					
CA	<i>Cordyline australis</i>	Ti Kōuka	8L/PB12	as marked	8m
PC	<i>Pseudapanax crassifolius</i>	Horoeka / Lancewood	8L/PB12	as marked	6m
Aruhe Native Mix (ARU) 178m²					
40%	<i>Festuca novae zelandiae</i>	Hard Tussock	RX90	750mm	0.7m
20%	<i>Poa cita</i>	Silver Tussock	RX90	750mm	0.7m
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10%	<i>Dianella nigra</i>	Tūrutu	RX90	750mm	0.5m
10%	<i>Olearia adenocarpa</i>	Canterbury Plains Tree Daisy	RX90	750mm	1.5m
5%	<i>Sophora prostrata</i>	Dwarf Kōwhai	RX90	750mm	1.8m
Pakihī Native Mix (PAK) 121m²					
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20%	<i>Muehlenbeckia astonii</i>	Shrub Pohuehue	3L/PB5	1500mm	1.75m
20%	<i>Ozothamnus leptophyllus</i>	Tauhīnu	3L/PB5	1500mm	1.75m
15%	<i>Veronica salicifolia</i>	Koromiko	3L/PB5	1500mm	2.0m
10%	<i>Austroderia richardii</i>	South Island Toe Toe	3L/PB5	1500mm	2.0m
10%	<i>Olearia adenocarpa</i>	Small-leaved Tree Daisy	3L/PB5	1500mm	1.5m
5%	<i>Teucrium parvifolium</i>	Teuclidium	3L/PB5	1500mm	1.5m

PLAN SOUTH
PLANTING PLAN SOUTH

Client
Pioneer Energy Ltd.

Project
Ecogas, Ōtautahi Organics Processing Facility,
17-21 Aruhe Road, Christchurch

Drawing
1975/03 Planting Plan South



Scale
1:250@A1
1:500@A3

Issue Date
2/07/24
Issue
RC

Drawn
AT
Checked
CC



TREES ABOVE 6M



Pittosporum eugenioides



Plagianthus regius

TREES UNDER 6M



Coprosma crassifolia



Griselinia littoralis



Hoheria angustifolia

NARROW ACCENT SPECIES



Cordyline australis



Pseudopanax crassifolius

ARUHE NATIVE MIX (ARU)



Festuca novae zelandiae



Poa cita



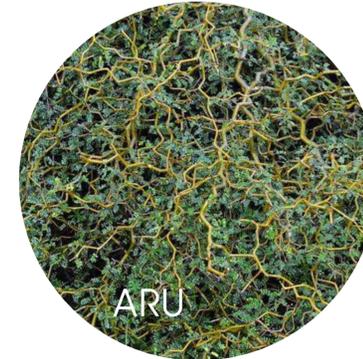
Muehlenbeckia astonii



Dianella nigra



Olearia adenocarpa



Sophora prostrata

PAKIHI NATIVE MIX (PAK)



Festuca novae zelandiae



Coprosma acerosa



Dianella nigra



Muehlenbeckia axillaris



Veronica odora



Melicytus alpinus

AMENITY NATIVE MIX (AME)



Phormium 'Green Dwarf'



Coprosma acerosa



Veronica odora

BUND NATIVE MIX (BUN)



Corokia cotoneaster



Muehlenbeckia astonii



Ozothamnus leptophyllus



Veronica salicifolia



Austroderia richardii

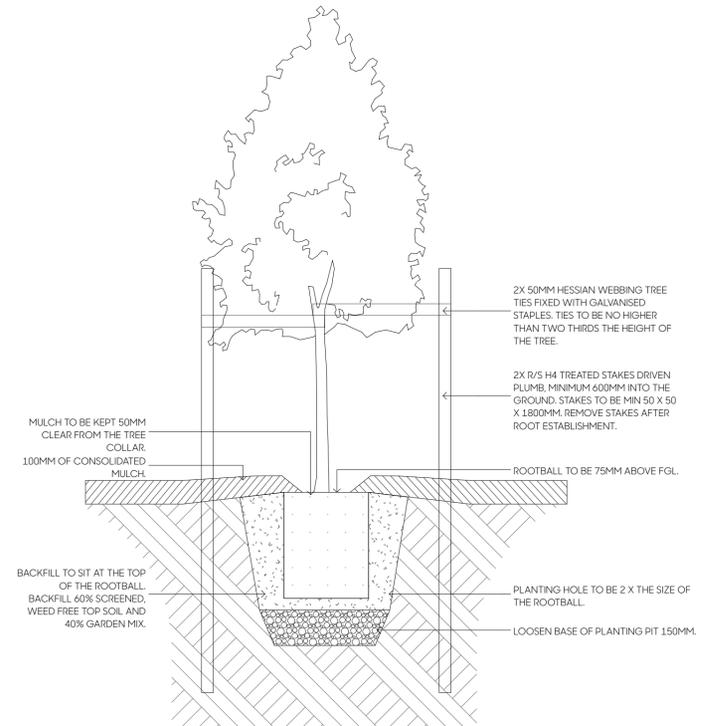
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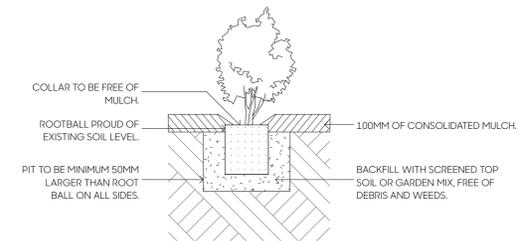
Olearia adenocarpa



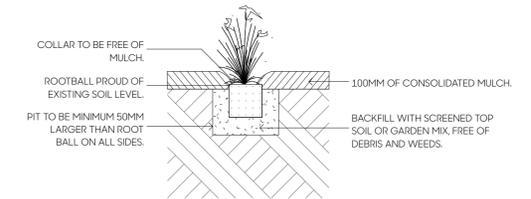
Teucrium parvifolium



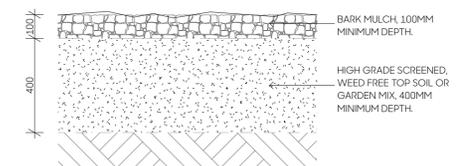
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PD-02: SHRUB IN GARDEN 1:15 @ A1, 1:30 @ A3



PD-03: GRASSES IN GARDEN 1:15 @ A1, 1:30 @ A3



PD-04: GARDEN BEDS 1:15 @ A1, 1:30 @ A3

Rules Assessment

Proposal: Ōtautahi Organics Processing Facility

Address: 17-21 Aruhe Road, Islington

CANTERBURY LAND AND WATER REGIONAL PLAN

Site Overlays	
Aquifer System	Semi-confined or unconfined aquifers
Nutrient Allocation Zone	Christchurch West-Melton
Groundwater Allocation Zone	Christchurch West-Melton

Rule	Compliance	Non-Compliance
On-Site Wastewater		
5.7 The discharge of wastewater from an existing on-site wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met (...)	N/A – The site will be connected to the Christchurch city council reticulated wastewater system.	
5.8A The discharge of wastewater from an existing, new, modified or upgraded back country hut wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:	N/A – no back country hut proposed.	
5.8B The discharge of wastewater from an existing, new, modified or upgraded back country hut wastewater treatment system onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.8A is a discretionary activity.	N/A – no back country hut proposed.	
5.9 The discharge of wastewater from: (a) an existing on-site wastewater treatment system	N/A – The site will be connected to the Christchurch city council reticulated wastewater system.	

Barker & Associates

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Rule	Compliance	Non-Compliance
<p>onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.7; or</p> <p>(b) a new, modified or upgraded on-site wastewater treatment system onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.8; is a restricted discretionary activity.</p>		
<p>Greywater</p>		
<p>5.12 The discharge of greywater onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met: (...)</p>	<p>N/A – no discharge of greywater proposed.</p>	
<p>5.13 The discharge of greywater onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.12 is a restricted discretionary activity.</p>	<p>N/A – no discharge of greywater proposed.</p>	
<p>Dust Suppressants</p>		
<p>5.18 The discharge of a dust suppressant onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided either of the following conditions is met:</p> <ol style="list-style-type: none"> 1. The discharge is only of vegetable oil, or of new light fuel or lubricating oil and is: <ol style="list-style-type: none"> (a) applied in a manner that does not result in pooling or runoff, with a maximum application rate not exceeding 2 litres/m² per day and 4 litres/m² per annum; and (b) not within 20 m of a surface water body, the Coastal Marine Area, a bore or soakhole; or 2. The dust suppressant is approved under the Hazardous 	<p>N/A - There will be no discharge of dust suppressant onto or into land.</p>	

Rule	Compliance	Non-Compliance
Substances and New Organisms Act 1996 and the use and discharge of the dust suppressant is in accordance with all conditions of the approval.		
5.19 The discharge of oil as a dust suppressant onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions in Rule 5.18 is a restricted discretionary activity.	N/A - There will be no discharge of dust suppressant onto or into land.	
Drainage Water		
<p>5.75 The discharge of drainage water from a drainage system into an artificial watercourse, constructed wetland or into or onto land is a permitted activity, provided the following conditions are met:</p> <p>1. The discharge into an artificial watercourse or constructed wetland, beyond the Mixing Zone as defined in Schedule 5, does not:</p> <p>(a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; and</p> <p>(b) produce any conspicuous change in the colour or visual clarity; and</p> <p>2. The discharge does not:</p> <p>(a) occur within a Community Drinking-water Protection Zone as set out in Schedule 1; and</p> <p>(b) contain any hazardous substance; and</p> <p>(c) originate from or enter contaminated or potentially contaminated land</p>	N/A – Drainage water will be connected to the reticulated system	
5.76 The discharge of drainage water from a drainage system into an artificial watercourse, constructed wetland or into or onto land that does not meet one	N/A – Drainage water will be connected to the reticulated system	

Rule	Compliance	Non-Compliance
<p>or more of the conditions of Rule 5.75 is a discretionary activity.</p>		
<p>5.77 The discharge of drainage water from a drainage system into a river, lake or wetland is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The discharge of land drainage water is only from a drainage system, the full spatial extent of which existed at 3 July 2004; and 2. The concentration of: <ol style="list-style-type: none"> (a) totalsuspended solids in the discharge does not exceed 50 g/m³ ; and (b) un-ionised hydrogen sulphide in the discharge does not exceed 0.005 g/m³ ; and 3. The discharge, beyond the Mixing Zone as defined in Schedule 5, does not: (a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or (b) produce any conspicuous change in the colour or visual clarity; or (c) render fresh water unsuitable for consumption by farm animalsto the extent that the concentration of E.coli exceeds 550 per 100 ml; and 4. The discharge does not: (a) occur within a Community Drinking-water Protection Zone as set out in Schedule 1; or (b) contain any hazardousubstance. 	<p>N/A – Drainage water will be connected to the reticulated system</p>	
<p>5.78 The discharge of drainage water from a drainage system into a river, lake or wetland that does not meet the conditions of Rule 5.77 is a discretionary activity.</p>	<p>N/A – Drainage water will be connected to the reticulated system</p>	
<p>5.79 The discharge of contaminants and water from the maintenance of artificial watercourses and associated structures into an artificial watercourse, constructed wetland or into or onto land is a permitted activity, provided the</p>	<p>N/A – Drainage water will be connected to the reticulated system</p>	

Rule	Compliance	Non-Compliance
<p>following conditions are met: 1. The discharge is only water, sediment, and vegetative matter originating from within the banks of the artificial watercourse; and 2. If the discharge subsequently enters a river, lake or wetland, the discharge, beyond the Mixing Zone as defined in Schedule 5, does not produce: (a) conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or (b) any conspicuous change in the colour or visual clarity.</p>		
<p>5.80 The discharge of contaminants and water from the maintenance of artificial watercourses and associated structures into an artificial watercourse, constructed wetland or into or onto land that does not meet one or more of the conditions of Rule 5.79 is a discretionary activity.</p>	<p>N/A – Drainage water will be connected to the reticulated system</p>	
<p>Industrial and Trade Wastes</p>		
<p>5.91 The discharge of any liquid waste or sludge waste from an industrial or trade process, including livestock processing, excluding wastewater, into or onto land, or into or onto land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The volume of the discharge does not exceed 10 m³ per day; and 2. The discharge is at a rate not exceeding 5 mm per day; and 3. The discharge does not contain any hazardous substance; and 4. The discharge is not: <ol style="list-style-type: none"> (a) directly to a surface water body, or within 50 m of a surface water body, a bore used for water abstraction, a dwelling house, school, community facility or the Coastal Marine Area; and 	<p>N/A – no industrial or trade waste is proposed to into or onto land.</p>	

Rule	Compliance	Non-Compliance
<p>(b) within a Community Drinking-water Protection Zone asset out in Schedule 1; and (c) within the Christchurch Groundwater Protection Zone as shown on the Planning Maps; and (d) onto or into land over an unconfined or semi-confined aquifer, where the land has less than 0.3 m depth of soil; and (e) within any area or zone identified in a proposed or operative district plan for residential or commercial purposes; and (f) within a Nutrient Allocation Zone identified as “At Risk” (Orange) or “Water Outcomes Not Met” (Red) on the Planning Maps, unless the discharge contains no nitrogen or phosphorus, or otherwise causes a limit in Schedule 8 to be exceeded; and (g) onto or into contaminated or potentially contaminated land.</p>		
<p>5.92 The discharge of any liquid waste or sludge waste from an industrial or trade process, including livestock processing, excluding wastewater, into or onto land, or into or onto land in circumstances where a contaminant may enter water that does not meet one or more of the conditions in Rule 5.91 is a discretionary activity.</p>	<p>N/A – no industrial or trade waste is proposed to into or onto land.</p>	
<p>Stormwater</p>		
<p>Reticulated Stormwater Systems</p>		
<p>5.93A The discharge of stormwater or construction-phase stormwater into a reticulated stormwater system is a permitted activity, provided the following condition is met:</p> <p>1. Written permission has been obtained from the owner of the reticulated stormwater system that allows entry of the stormwater into the reticulated stormwater system.</p>	<p>Complies – stormwater is proposed to discharge into the reticulated system with permission from CCC received.</p>	

Rule	Compliance	Non-Compliance
<p>5.93 The discharge of stormwater or construction-phase stormwater from a reticulated stormwater system onto or into land or into or onto land in circumstances where a contaminant may enter water, or into groundwater or a surface waterbody is a restricted discretionary activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. For a discharge that existed at 11 August 2012, an application for a discharge permit is lodged prior to 30 June 2018, or at a later date as agreed between the reticulated stormwater system operator and the CRC; and 2. A stormwater management plan has been prepared to address the management of stormwater in the catchment and is lodged with the application; and 3. The discharge will not cause a limit in Schedule 8 to be exceeded. 	<p>Complies – stormwater is proposed to discharge into the reticulated system with permission from CCC received</p>	
<p>5.94 The discharge of stormwater or construction-phase stormwater from a reticulated stormwater system onto or into land or into or onto land in circumstances where a contaminant may enter water, or into groundwater or a surface waterbody that does not meet the conditions of Rule 5.93 is a non complying activity.</p>	<p>Complies – stormwater is proposed to discharge into the reticulated system with permission from CCC received</p>	
<p>Stormwater Construction Phase</p>		
<p>5.94A - The discharge of construction-phase stormwater, other than into or from a reticulated stormwater system, to a surface waterbody, or onto or into land in circumstances where a contaminant may enter groundwater or surface water, is a permitted activity, provided the following conditions are met:</p>	<p>Complies – stormwater is proposed to discharge into the reticulated system with permission from CCC received</p>	

Rule	Compliance	Non-Compliance
<p>1. The area of disturbed land from which the discharge is generated is less than:</p> <p>(a) 1000m² for any construction-phase stormwater generated as a result of work carried out in an area shown as High Soil Erosion Risk on the Planning Maps; or</p> <p>(b) two hectares in any other location; and</p> <p>2. The concentration of total suspended solids in the discharge shall not exceed:</p> <p>(a) 50g/m³ where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or</p> <p>(b) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case Schedule 5 visual clarity standards shall apply; and</p> <p>3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and</p> <p>4. The discharge is not from, into or onto contaminated or potentially contaminated land; and</p> <p>5. The discharge does not contain any hazardous substance; and</p> <p>6. The discharge does not occur within a Community Drinking-water Protection Zone as set out in Schedule 1.</p>		
<p>5.94B The discharge of construction-phase stormwater,</p>	<p>Complies – stormwater is proposed to discharge into the</p>	

Rule	Compliance	Non-Compliance
<p>other than into or from a reticulated stormwater system, into a surface waterbody, or onto or into land in circumstances where a contaminant may enter groundwater or surface water, that does not meet one or more of the conditions of Rule 5.94A is a restricted discretionary activity. The exercise of discretion is restricted to the following matters:</p> <ol style="list-style-type: none"> 1. The actual and potential effects of the discharge on the quality of surface water, aquatic ecosystems, Ngāi Tahu cultural values; and 2. The actual and potential effects of the discharge on the quality and safety of human and animal drinking water; and 3. The actual and potential adverse environmental effects of the quantity of water to be discharged on the banks or bed of a waterbody or on its flood carrying capacity, and on the capacity of the network to convey that discharge; and 4. The potential benefits of the activity to the applicant, the community and the environment. 	<p>reticulated system with permission from CCC received</p>	
Stormwater - Operational Phase		
<p>5.95 – The discharge of stormwater, other than into or from a reticulated stormwater system, into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter a river, lake, wetland, or artificial watercourse is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The discharge is not from, into or onto contaminated or potentially contaminated land; and 2. The discharge is not into: 	<p>N/A – stormwater is discharged into the reticulated system</p>	

Rule	Compliance	Non-Compliance
<p>(a) a water race, as defined in Section 5 of the Local Government Act 2002; and</p> <p>(b) a wetland, unless the wetland is part of a lawfully established stormwater or wastewater treatment system; and</p> <p>(c) a waterbody that is Natural State, unless the discharge was lawfully established before 1 November 2013; and</p> <p>3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and</p> <p>4. The discharge meets the water quality standards in Schedule 5 after reasonable mixing with the receiving waters, in accordance with Schedule 5; and</p> <p>5. The concentration of total suspended solids in the discharge shall not exceed:</p> <p>(a) 50 g/m³ , where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50 g/m³ in which case the Schedule 5 visual clarity standards shall apply;</p> <p>(b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply; and</p> <p>6. The discharge to water is not within a Community Drinking-water Protection Zone as set out in Schedule 1; and</p>		

Rule	Compliance	Non-Compliance
7. The discharge does not occur where there is an available reticulated stormwater system.		
<p>5.96 – The discharge of stormwater, other than into or from a reticulated stormwater system, onto or into land where contaminants may enter groundwater is a permitted activity, provided the following conditions are met:</p> <p>1. The discharge is not from, into or onto contaminated or potentially contaminated land; and</p> <p>2. The discharge:</p> <p>(a) does not cause stormwater from up to and including a 24 hour duration 10% Annual Exceedance Probability rainfall event to enter any other property; and</p> <p>(b) does not result in the ponding of stormwater on the ground for more than 48 hours, unless the pond is part of the stormwater treatment system; and</p> <p>(c) is located at least 1m above the highest groundwater level that can be reasonably inferred for the site at the time the discharge system is constructed; and</p> <p>(d) is only from land used for residential, educational or rural activities; and</p> <p>(e) does not occur where there is an available reticulated stormwater system, except where incidental to a discharge to that system; and</p> <p>(f) is not from a system that collects and discharges stormwater from more than five sites.</p>	N/A – stormwater is discharged into the reticulated system	
5.97 – The discharge of stormwater, other than from a reticulated stormwater system, into a river, lake, wetland or artificial watercourse or onto or	N/A – stormwater is discharged into the reticulated system	

Rule	Compliance	Non-Compliance
<p>into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.95 or Rule 5.96; and the discharge of stormwater or construction-phase stormwater into reticulated stormwater system that does not meet the condition of Rule 5.93A; is a discretionary activity except that within boundaries of Christchurch is a non-complying activity</p>		
<p>Other Minor Contaminant Discharges</p>		
<p>Rule 5.98 – Any discharge of water or contaminants onto or into land in circumstances where a contaminant may enter groundwater that is not classified by any of the above rules, is a permitted activity provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The volume of the discharge does not exceed 10m³ per day and the application rate does not exceed 10mm per day; and 2. The discharge is not directly into groundwater; and 3. The discharge does not result in any overflow or runoff into any surface water body or onto neighbouring site; and 4. The discharge does not, in groundwater, render freshwater unsuitable or unpalatable for consumption by animals or humans’ and 5. The discharge does not contain any hazardous substance, hazardous waste or added radioactive isotope; and 6. The discharge does not occur when the soil 	<p>N/A – land is not considered to be contaminated</p>	

Rule	Compliance	Non-Compliance
<p>moisture exceeds field capacity; and</p> <p>7. The discharge is not from or into contaminated or potentially contaminated land; and</p> <p>8. The discharge is not within</p> <p>(a) 50m of a bore used for water abstraction; or</p> <p>(b) Within a Community Drinking-water Protection Zone as set out in Schedule 1; and</p> <p>9. Where the discharge is from the use of live ammunition associated with military training under the Defence Act 1990, conditions 1 to 8 do not apply.</p>		
<p>5.99 - Any discharge of water or contaminants into surface water or onto or into land in circumstances where it may enter surface water that is not classified by any of the above rules, is a permitted activity, provided the following conditions are met:</p> <p>1. The discharge is not from or into contaminated or potentially contaminated land; and</p> <p>2. The discharge is not into a Natural State water body; and</p> <p>3. The discharge meets the water quality standards in Schedule 5 after reasonable mixing with the receiving waters, in accordance with Schedule 5; and</p> <p>4. The concentration of total suspended solids in the discharge shall not exceed:</p>	<p>N/A – land is not considered to be contaminated</p>	

Rule	Compliance	Non-Compliance
<p>(a) 50 g/m³, where the discharge is to any Spring-fed river, Banks Peninsula river, or to a lake; or</p> <p>(b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse; and</p> <p>5. The discharge does not result in more than a 20% change in the rate of flow of the receiving surface water body; and</p> <p>6. The discharge does not contain any hazardous substance, hazardous waste or added radioactive isotope.</p>		
<p>5.100 - Any discharge that is not permitted by either Rule 5.98 or 5.99 and is not classified by any other rule in this Plan is a discretionary activity.</p>	<p>N/A – land is not considered to be contaminated</p>	
<p>Earthworks over Aquifers</p>		
<p>5.175 – The use of land to excavate material is a permitted activity, provided the following conditions are met:</p> <p>1. Over the Coastal Confined Gravel Aquifer System, as shown on the Planning Maps:</p> <p>a. there is more than 1m of undisturbed material between the deepest part of the excavation and Aquifer 1; and</p> <p>b. If more than 100m³ of material is excavated, the excavation does not occur within 50m of any surface waterbody; or</p> <p>2. Over an unconfined or semi-confined aquifer:</p> <p>a. The volume of material excavated is less than 100m³; or</p> <p>b. The volume of material excavated is more than 100m³ and:</p> <p>(i) There is more than 1m of undisturbed material between the deepest part of the excavation and the highest groundwater level; and</p>	<p>Earthworks are proposed to occur over a semi-confined/unconfined aquifer in exceedance of 100m³ however the maximum depth of excavation is 500mm and groundwater as a depth of 12m, providing excess of more than 1m of undisturbed material between the excavation and the aquifer and is a permitted activity.</p>	

Rule	Compliance	Non-Compliance
(ii) The excavation does not occur within 50m of the surface waterbody.		
5.176 - The use of land to excavate material that does not comply with one or more of the conditions of Rule 5.175 is a restricted discretionary activity.	Proposal complies with 5.176.	
<p>5.177 The use of land for the deposition of more than 50m³ of material in any consecutive 12 month period onto land which is excavated to a depth in excess of 5m below the natural land surface and is located over an unconfined or semi-confined aquifer, where the highest groundwater level is less than 5m below the deepest point in the excavation, and the associated discharge of contaminants onto or into land where it may enter water, is a controlled activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The material is only cleanfill; and 2. The volume of vegetative matter in any cubic metre of material deposited does not exceed 3%; and 3. The material is placed in the land at least 1 m above the highest groundwater level at the site; and 4. The material is not concrete slurry, coal tar or hydro-excavated waste; and 5. The material is not deposited onto or into land that is listed as an archaeological site; and 6. A management plan has been prepared in accordance with Section 8.1 and Appendix B of “A Guide to the Management of Cleanfills”, Ministry for the Environment, January 2002; and 7. A site rehabilitation plan has been prepared for the site and is 	Depth of cut will not exceed 5m with the deepest excavation being 500mm and is a permitted activity.	

Rule	Compliance	Non-Compliance
submitted with the application for resource consent.		
5.178 - The use of land for the deposition of more than 50 m ³ of material in any consecutive 12 month period onto land which is excavated to a depth in excess of 5m below the natural land surface and is located over an unconfined or semi-confined aquifer, where the highest groundwater level is less than 5 m below the deepest point in the excavation, and the associated discharge of contaminants onto or into land where it may enter water, that does not comply with one or more of the conditions of Rule 5.177 is a restricted discretionary activity.	Depth of cut will not exceed 5m with the deepest excavation being 500mm and is a permitted activity.	
Hazardous Substances		
5.179 The use of land for the storage in a portable container and use of a hazardous substance listed in Part A of Schedule 4 is a permitted activity, provided the following conditions are met: 1. The substance is approved under the Hazardous Substances and New Organisms Act 1996 and the storage and use of the substance is in accordance with all conditions of the approval; and 2. The container(s) are not located within: (a) 20 m of a surface water body or a bore; or (b) a Community Drinking-water Protection Zone asset out in Schedule 1.	As detailed in Appendix 12 . Any substance proposed is approved under the Hazardous Substances and New Organisms Act 1996 with a HSMP prepared and there are no surface waterbodies or bores with 20m of the site nor is the site within the community drinking water protection zone and therefore is a permitted activity.	
5.180 The use of land for the storage in a portable container and use of a hazardous substance listed in Part A of Schedule 4 that does not meet one or more of the conditions in Rule 5.179 is a restricted discretionary activity.	As detailed in Appendix 12 . Any substance proposed is approved under the Hazardous Substances and New Organisms Act 1996 with a HSMP prepared and there are no surface waterbodies or bores with 20m of the site nor is	

Rule	Compliance	Non-Compliance
<p>5.181 The use of land for the storage, other than in a portable container, and use of a hazardous substance listed in Part A of Schedule 4 is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The substance is approved under the Hazardous Substances and New Organisms Act 1996 and the storage and use of the substance is in accordance with all conditions of the approval; and 2. A current inventory of all hazardous substances on the site is maintained, and a copy of the inventory shall be made available to the CRC or emergency services on request; and 3. For hazardous substances stored or held on or over land, all areas or installations used to store or hold hazardous substances are inspected at least once per month or annually if the site is outside of any area or zone identified in a proposed or operative district plan for residential, commercial or industrial purposes and is unstaffed, and repaired or maintained if any defects are found that may compromise the containment of the hazardous substance; and 4. For hazardous substances stored or held in a container located in or under land: <ol style="list-style-type: none"> (a) if there has been any physical loss of product, then the Canterbury Regional Council shall be notified within 24 hours of confirmation of the loss; and (b) records of stock reconciliations over the past 12 months shall be made available to the CRC upon request. If 	<p>the site within the community drinking water protection zone</p> <p>As detailed in Appendix 12 hazardous substances will be stored and present onsite however the following conditions are met:</p> <ol style="list-style-type: none"> 1. All hazardous substances are approved by the Hazardous Substances and New Organisms Act 1996. 2. An inventory of the hazardous substances at the site will be maintained on site and will be made available to Ecan and emergency services on request. 3. A draft HSMP has been prepared for the site which details a requirement to carry out monthly inspections of all tanks and areas where substance are stored. 4. No hazardous substances will be held in or below the ground 5. The site is not in the community drinking water protection zone. 6. There are no surface waterbodies or bores within 20m of the site. There are no known active faults within 250m of the site. <p>Accordingly the proposal is a permitted activity.</p>	

Rule	Compliance	Non-Compliance
<p>requested, a copy of the stock reconciliation and the most recent certification of the container shall be provided to the CRC within five working days; and</p> <p>5. For substances stored within a Community Drinking-water Protection Zone as set out in Schedule 1:</p> <p>(a) all hazardous substances on a site are stored under cover in a facility which is designed, constructed and managed to contain a leak or spill and allow the leaked or spilled substance to either be collected or lawfully disposed of; and</p> <p>(b) spill kits to contain or absorb a spilled substance are located with the storage facility and use areas at all times and</p> <p>6. Except where the storage was lawfully established before 4 July 2004 and the maximum quantity stored has not increased since that date, or the storage relates to transformers and other equipment associated with electricity infrastructure, the substances shall not be stored within:</p> <p>(a) 20 m of a surface waterbody or a bore used for water abstraction; or</p> <p>(b) 250 m of a known active fault that has a recurrence period of less than 10,000 years, and the land is:</p> <p>(i) over an unconfined or semi-confined aquifer; or</p> <p>(ii) within 50 m of a permanently or intermittently flowing river or a lake.</p>		
<p>5.182 The use of land for the storage, other than in a portable container, and use of a hazardous substance listed in Part A of Schedule 4 that does not meet one or more of the</p>	<p>Complies with 5.181 and the proposal is a permitted activity.</p>	

Rule	Compliance	Non-Compliance
conditions in Rule 5.181 is a discretionary activity.		
<p>5.183 The use of land for the decommissioning of a container located on, in or under land that is or has been used to store a hazardous substance is a permitted activity, provided the following condition is met:</p> <p>1. The information listed in Part B of Schedule 4 is provided to the CRC at least one week before the decommissioning is undertaken, except for item 12, which is to be provided within one month of completion of the report or plan for each phase of the investigation or remediation.</p>	<p>N/A – The proposed the proposed development is a greenfield development and as such, there are no containers on site which have formerly been used to store hazardous substances.</p>	
<p>5.184 The use of land for the decommissioning of a container located on, in or under land that is or has been used to store a hazardous substance that does not meet the condition in Rule 5.183 is a discretionary activity.</p>	<p>N/A – The proposed the proposed development is a greenfield development and as such, there are no containers on site which have formerly been used to store hazardous substances.</p>	
Section 9 – Canterbury / West Melton		
Stormwater		
<p>9.5.17 The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter a river, lake, wetland or artificial watercourse in the Avon/Otakaro or Heathcote catchments that is not (a) authorised by a consented stormwater management plan; or (b) into a reticulated stormwater system is a discretionary activity.</p>	<p>N/A – located within the Selwyn/Waimakariri Plains catchment boundary.</p>	
<p>9.5.18 The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter a river, lake, wetland or artificial watercourse in the Halswell</p>	<p>N/A – located within the Selwyn/Waimakariri Plains catchment boundary.</p>	

Rule	Compliance	Non-Compliance
River/Huritini Catchment that is not authorised by a consented stormwater management plan and the discharge did not occur before 5 December 2013, is a discretionary activity		

CANTERBURY AIR REGIONAL PLAN (2017)

Rule	Compliance	Non-Compliance
Rules applying to all activities		
7.1 Any activity must comply with all applicable rules in Section 7 of this Plan, except where explicitly stated to the contrary in any other applicable rule in this Plan.		
7.2 In considering applications for controlled activities or restricted discretionary activities, the matters on which: 1. control is reserved; 2. or exercise of discretion is restricted;	N/A	
7.3 The discharge of odour, dust or smoke into air that is not managed by any other rule in this Plan is a permitted activity provided the following conditions are met: 1. The discharge does not cause or is not likely to cause an adverse effect beyond the boundary of the property of origin; and 2. The discharge does not cause an offensive or objectionable effect beyond the boundary of the property of origin when assessed in accordance with Schedule 2.	The discharge is managed under rule 7.63	
7.4 The discharge of odour, dust or smoke into air that is not managed by any other rule in this Plan and that does not meet condition 1 of Rule 7.3 is a restricted discretionary activity.	The discharge is managed under rule 7.63	
7.5 The discharge of odour, dust or smoke into air that does not meet condition 2 of Rule 7.3 is a non-complying activity.	The discharge is managed under rule 7.63	
7.6 The discharge of any contaminant into air that causes a noxious or dangerous effect and that is not otherwise classified by a rule in this Plan is a prohibited activity.	N/A – no discharge of contaminants to air.	

Rule	Compliance	Non-Compliance
7.7 Except where provided for by Rule 7.10, the discharge of contaminants into air from outdoor burning or burning in a small-scale heating appliance of: <ul style="list-style-type: none"> a. any quantity of a material listed in Part A below; or b. a material listed in Part B below, except: <ul style="list-style-type: none"> (i) where that material is present in minor quantities and cannot be readily separated from the principal material being burnt; or (ii) where the burning is on a marae and in accordance with tikanga Māori; 	N/A – no outdoor burning.	
7.8 Except where prohibited under Regulations 7 to 12 of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004, the discharge of contaminants into air from burning in a large scale fuel burning device or incinerator or as part of an industrial or trade process of any material listed in Part A or Part B of Rule 7.7 is a discretionary activity.		
7.9 The discharge of contaminants into air from the outdoor burning of any waste materials within a landfill or waste transfer station or waste recovery area, but excluding landfill gas, is a prohibited activity.	N/A – no waste products are being burnt.	
Large scale fuel burning device		
7.20 The discharge of contaminants into air from the external combustion of fuel in any large scale fuel burning device is a permitted activity provided the following conditions, where applicable, are met: <p>All devices</p> <ol style="list-style-type: none"> 1. The discharge is directed vertically into air and is not impeded by any 		<p>The proposal involves the external combustion of biogas fuel in the dryers and boilers. Condition 3 is unable to be met as the boiler stacks will be slightly lower than the necessary 7, height specified in schedule 5 for gas appliances.</p> <p>The proposal is not considered to be covered under condition 5 and therefore condition and</p>

Rule	Compliance	Non-Compliance
<p>obstruction above the emission stack which decreases the vertical efflux velocity below that which would occur in the absence of such obstruction; and</p> <p>2. Except for a period not exceeding two minutes in each hour of operation, the opacity of the discharge is not darker than Ringelmann Shade No. 1, as described in Schedule 6; and</p> <p>3. The emissions are discharged through an emission stack which meets the requirements set out in Schedule 5; and</p> <p>4. The fuel burning equipment is maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment, a copy of each maintenance report is held for three years and made available to the CRC on request, and the annual maintenance includes adjustment, as required, of the fuel to air mix and testing of the ratio of combustion gases discharged to optimise efficiency; and</p> <p>Gas fired</p> <p>5. Where the discharge is from the combustion of liquefied petroleum gas or compressed natural gas, the combined net energy output capacity of all gas-fired</p>		<p>therefore 5-7 (covering net output generating capacity) are not considered applicable.</p>

Rule	Compliance	Non-Compliance
devices is less than or equal to 5MW;		
7.21 The discharge of contaminants into air from the external combustion of fuel in any large scale fuel burning device, that does not comply with condition 3 of Rule 7.20 is a restricted discretionary activity.		The proposal is unable to comply with condition 3 of rule 7.20 and is a restricted discretionary activity pursuant to rule 7.21.
7.22 Outside a Clean Air Zone, the discharge of contaminants into air from the external combustion of solid fuel in any large scale fuel burning device that does not meet one or more of conditions 7(c), 7(d) or 7(e) of Rule 7.20, is a restricted discretionary activity.	N/A - Site is located within the clean air zone.	
7.24 The discharge of contaminants into air from the external combustion of fuel in any large scale fuel burning device that does not meet one or more of conditions 1, 2, 4, 5 or 6 of Rule 7.20, or the discharge of contaminants from the burning of solid fuel outside a Clean Air Zone that does not meet condition 7(a) of Rule 7.20, is a discretionary activity.	N/A – no external combustion large-scale fuel burning and site is not located within the clean air zone.	
7.25 Within a Clean Air Zone, the discharge of contaminants into air from the external combustion of solid fuel in any large scale fuel burning device that does meet condition 1 of Rule 7.23 is a non-complying activity.	N/A – no large-scale fuel burning from external combustion is proposed.	
7.26 The discharge of contaminants into air from the internal combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any moveable large scale fuel burning device with a combined net electrical output capacity of up to 500kW is a permitted	N/A – burning device is not moveable?	

Rule	Compliance	Non-Compliance
activity, provided the following conditions are met:		
7.27 The discharge of contaminants into air from the internal combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any moveable large scale fuel burning device with a combined net electrical output capacity not greater than 500kW, and that is for the purpose of emergency electricity generation by a network lines operator is a permitted activity, provided the following conditions are met:	N/A – no large-scale fuel burning is proposed for the purpose of emergency electricity generation.	
7.28 The discharge of contaminants into air from the internal combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any stationary large scale fuel burning device with a combined net electrical output capacity not greater than 300kW and that is for the purpose of emergency electricity generation, maintenance and peak electricity network load management, is a permitted activity provided the following conditions are met:	The diesel generator will be used in accordance with the standards set out in rule 7.28 above. The discharge will occur at a distance greater than 50m from a sensitive activity (nearest receptor is 300m to North). A record of operational hours will be kept at the facility for assessment against the standards in this permitted activity rule. As the diesel generator is a permitted activity the discharges will not be considered further.	
7.29 The discharge of contaminants into air from the internal combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any stationary large-scale fuel burning device with a combined net electrical output capacity of: a. 301kW to 1MW within a Clean Air Zone; or b. 301kW to 2MW outside a Clean Air Zone and that is for the purpose of emergency electricity generation, maintenance and peak electricity network load management, is a controlled activity provided the following conditions are met:	N/A Proposal is not for the purpose of emergency electricity generation, or maintenance and peak electricity network load management.	

Rule	Compliance	Non-Compliance
<p>7.30 The discharge of contaminants into air from the internal combustion of fuel in any large scale fuel burning device that does not comply with one or more of the conditions of Rules 7.26 to 7.29, or that is not otherwise managed by a rule in this Plan, is a discretionary activity.</p>		<p>The internal combustion does not meet 7.26 – 7.29 and is there for a discretionary activity.</p>
<p>Industrial trade or commercial activities</p>		
<p>7.32 - The discharge of dust to air beyond the boundary of the property of origin from the construction of buildings, land development activities, unsealed surfaces or unconsolidated land, is a permitted activity provided the following conditions, where applicable, are met:</p> <ul style="list-style-type: none"> (1) The building to be constructed...; and (1) The area of unsealed surface or unconsolidated land is less than 1,000m², or where the area of unsealed surface or unconsolidated land is greater than 1,000m² a dust management plan is prepared in accordance with Schedule 2 and implemented by the person responsible for the discharge into air; and <p>The discharge does not cause an offensive or objectionable effect beyond the boundary of the property of origin, when assessed in accordance with Schedule 2.</p>	<p>Proposal is anticipated to comply</p>	
<p>7.33 The discharge of dust, beyond the boundary of the property of origin, from the construction of buildings, land development activities, unsealed surfaces or unconsolidated land that does not meet condition 1 or 2 of Rule 7.32 is a restricted discretionary activity.</p>	<p>The proposal complies with 7.32 and therefore 7.33 is not applicable.</p>	

Rule	Compliance	Non-Compliance
7.34 The discharge of dust into air beyond the boundary of the property of origin, from the construction of buildings, land development activities, unsealed land or unconsolidated surfaces that does not meet condition 3 of Rule 7.32 is a non-complying activity.	The proposal complies with 7.32 and therefore 7.34 is not applicable.	
7.35 The discharge of contaminants into air from the handling of bulk solid materials is a permitted activity provided the following conditions are met	N/A – proposal does not involve the handling of bulk solid materials	
7.36 The discharge of contaminants into air from the outdoor storage of bulk solid materials is a permitted activity provided the following conditions are met:	N/A – not bulk solid materials are proposed to be stored outside?	
7.37 The discharge of contaminants into air from the cleaning, conveying, packaging, processing, handling, treatment or storage of seeds, is a permitted activity provided the following conditions are met:	N/A - no seed waste	
7.38 The discharge of contaminants into air from the generation, conveyance, collection, storage or filtration of wood waste, is a permitted activity provided the following conditions are met:	N/A - no wood waste	
7.39 The discharge of contaminants into air from dry or wet abrasive blasting in an enclosed booth is a permitted activity provided the following conditions are met:	N/A – no abrasive blasting	
7.40 The discharge of contaminants into air from temporary dry or wet abrasive blasting is a permitted activity provided the following conditions are met:	N/A – no abrasive blasting	
Waste management and disposal		

Rule	Compliance	Non-Compliance
<p>7.47 The discharge of contaminants into air from the storage, transfer, handling, treatment or disposal of waste, that was established on or before 1 June 2002, and where the CRC did not require a resource consent for the discharge of contaminants into air from that activity on or before 1 June 2002, is a permitted activity provided the following conditions are met:</p>	<p>N/A – the proposal is for a new activity.</p>	
<p>7.48 The discharge of contaminants into air from waste transfer sites is a permitted activity provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The discharge does not cause an offensive or objectionable effect beyond the boundary of the property of origin when assessed in accordance with Schedule 2; and 2. The discharge does not occur within 50m of a sensitive activity on another property; and 3. The discharge is only from the handling of non-hazardous municipal solid waste, green waste, or cleanfill; and 4. If there is a discharge of odour or dust beyond the boundary of the property of origin, an odour and/or dust management plan is prepared in accordance with Schedule 2 and implemented by the person responsible for the discharge into air; and 5. The odour and/or dust management plan is supplied to the CRC on request; and 6. The quantity of solid waste on the property does not exceed 10t per day averaged over a calendar month. 	<p>N/A – proposal is not a waste transfer site</p>	
<p>7.49 The discharge of contaminants into air from the disposal of cleanfill is a permitted activity provided the following conditions are met:</p>	<p>N/A – The proposal does not include the disposal of cleanfill material</p>	

Rule	Compliance	Non-Compliance
7.50 The discharge of contaminants into air from the treatment and disposal of less than 50m ³ per day of human sewage effluent averaged over a calendar month is a permitted activity provided the following conditions are met:	N/A – there is no disposal of human sewage.	
7.51 The discharge of contaminants into air from reticulated sewerage networks is a permitted activity provided the following conditions are met:	N/A – there will be no discharge to air from reticulated sewerage networks.	
7.52 The discharge of contaminants into air from reticulated sewerage networks that does not comply with condition 2 of Rule 7.51, is a restricted discretionary activity.	N/A – there will be no discharge to air from reticulated sewerage networks.	
Other		
7.53 The discharge of contaminants into air, including vapour ventilation and displacement, from the storage or transfer of petroleum products (including liquefied petroleum gas), is a permitted activity provided the following conditions are met:	N/A – Doesn't include the storage or transfer of petroleum products?	
7.54 The discharge of contaminants into air from dry cleaning units recovering hydrocarbon solvents emitted from fabric washing and drying processes is a permitted activity provided the following conditions are met:	N/A – proposal does not involve fabric washing or drying.	
7.55 The discharge of contaminants into air from a forced extraction vent used by a laundry serving an institution, commercial, industrial or trade premise is a permitted activity provided the following conditions are met:	N/A – the proposal does not include a forced extraction vent for laundry servicing.	
7.56 The discharge of contaminants into air from mechanical grinding, cutting and shaping by application of heat,	N/A – No mechanical grinding, cutting and shaping by application of heat, machining,	

Rule	Compliance	Non-Compliance
machining, welding, soldering or arc air gouging of metals is a permitted activity provided the following conditions are met:	welding, soldering or arc air gouging of metals is proposed.	
7.57 The discharge of contaminants into air from the production of less than 50kg dry weight per day of clay materials or glazing materials by firing in kilns heated by electricity or combustion of natural gas or liquid petroleum gas, is a permitted activity.	N/A – the production of clay or glazing materials is proposed	
7.58 The discharge of heat, steam or water vapour into air from cooling towers or air-cooled heat exchangers, is a permitted activity provided the following condition is met:	N/A – the proposal does not involve cooling towers or air-cooled heat exchangers.	
7.59 The discharge of contaminants into air from cooking or processing by application of heat, steam or smoke of up to 10t of animal or plant matter per day is a permitted activity provided the following conditions are met:	N/A – the proposal does not involve the cooking or processing by application of heat to plant matter.	
7.60 The discharge of contaminants into air from laboratory fume cupboards is a permitted activity provided the following conditions are met:	N/A – no laboratory fume cupboards are proposed.	
7.61 The discharge of contaminants into air during fumigation is a permitted activity provided the following condition is met:	N/A – no fumigation proposed	
7.62 The discharge of contaminants into air from the ventilation of buildings located on industrial or trade premises, where that discharge is not via forced extraction to an emission stack or treatment system, is a permitted activity provided the following conditions are met:	N/A – no discharge from ventilation of buildings.	
Activities not otherwise provided for		
7.63 The discharge of contaminants into air: 1. that		The primary activities on-site related to anaerobic digestion do

Rule	Compliance	Non-Compliance
<p>does not comply with one or more of the conditions of Rules 7.47 to 7.62, excluding condition 1 of Rules 7.47, 7.48, 7.49, 7.50 7.51, 7.55, 7.59 and 7.62; or 2. that is from an industrial or trade premise and is not managed by Rules 7.47 -7.62; and is not a prohibited activity, is a discretionary activity.</p>		<p>not fit any of the specific rules in the plan and is therefore assessed as an activity not otherwise provided for and is a discretionary activity.</p>
<p>7.64 The discharge of contaminants into air that does not comply with condition 1 of Rules 7.47, 7.48, 7.49, 7.50 7.51, 7.55, 7.59 and 7.62 is a non-complying activity.</p>	<p>Complies with each of these conditions.</p>	