



Whalan and Partners Ltd, Bayleys
Licensed under the REA Act 2008

This information Memorandum, title or other supplementary property information (the "Information") has been prepared by Whalan and Partners Limited, trading as Bayleys ("Bayleys") as agent for "the Vendor". The Information contains information that is publicly available and/or sourced from third parties and capable of independent verification. It has been prepared solely to assist interested parties in deciding whether to further their interest in the Property and Whalan and Partners Limited is acting as a conduit and merely passing this information over. Prospective purchasers must not confine themselves to the contents of the Information but should, in conjunction with their professional advisors, make their own evaluation of the Property and conduct their own investigation, analysis and verification of the data contained in the Information and otherwise concerning the Property. Such evaluation should extend to and include whether there has been a change in the affairs or prospects of the Property since the date of the Information or since the date as at which any information contained in the Information is expressed to be applicable.

Bayleys and the Vendor have not verified any of the detail contained in the Information and Bayleys and the Vendor make no representation or warranty as to the accuracy or completeness of the information and neither Bayleys nor the Vendor accept and/or shall have any liability whatsoever for the accuracy of any part of the information including any liability for any statements, opinions, information or matters (expressed or implied) arising out of, contained in or derived from the Information, or any omissions from, or failure to correct any information, or any other written or oral communications transmitted to any recipient of the Information in relation to the Property.

Report / Decision on a Non-notified Subdivision Consent Application

Sections 95A / 95B and 104 and 104C and 221(3)

Application Number:	RMA/2021/19
Applicant:	Knights Stream Estate Limited
Site address:	60A Whincops Road
Site area:	6.9560ha
Legal Description:	Lots 2, 3 and 4 DP 823392
Zoning:	Residential Suburban
Overlays and map notations:	Liquefaction Management Area, Water Body Setback and Halswell West Outline Development Plan

Activity Status - subdivision:	Restricted discretionary
Activity Status - land use:	Restricted discretionary
Activity Status – NES:	Restricted discretionary
Activity Status – 221(3):	Discretionary

The contents of this documentation are strictly subject to the terms and conditions of the disclaimer contained at the front of this documentation. Prospective purchasers must accordingly read and acquaint themselves with the disclaimer prior to reading the documentation

Description of Application: 24 fee simple lot subdivision

The proposal

This application is to undertake a 24 lot residential subdivision with associated earthworks, roading, infrastructure and utility reserves.

The key elements of the subdivision proposal are described below:

Subdivision:

- This proposal is to create 24 residential allotments range from 528m² to 1,169m² in size.
- The subdivision is to be undertaken in one stage.
- One lot is proposed as a road to vest. This consists on an extension of Kruger Road and an adjoining cul de sac designed road. The roads do not meet the standards outlined in Appendix 8.10.3 of the District Plan.
- Lots 27 and 28 are to be vested as a local purpose utility and access reserves. Lot 27 is Local Purpose (Access) Reserve that is facilitating pedestrian and cycle connections from Whincops Road to Kruger Road in accordance with the Halswell West ODP. Lot 28 is an additional Local Purpose (Utility) Reserve which is required as a secondary flow path and will also be used to connect to an existing sewer which extends out to Whincops Road.
- Most of the allotments will gain direct access to the proposed road. Lots 5-6, 12-14, 18-19 will gain access via their respective right of ways.
- Two additional lots of surplus land (Lot 25 and 26) are also being created and are proposed to be amalgamated to the adjoining neighbouring properties (Lot 1 DP 20464 and Lot 3 DP 67573).
- Two balance allotments Lots 30 and 40 will also be created. They both contain existing residential dwellings and are anticipated to be developed in the future.

Earthworks:

- The proposed subdivision will result in bulk earthworks of a volume of 6000m³. These are required shaping of the allotments, road formation and ground improvements; and
- Earthworks within the waterway setback are required to undertake TC3 remediation

Land use consent:

- A global consent is proposed to allow future dwellings on proposed Lots 15 and 16 to have a reduced road boundary setback. The proposed setback is three metres; and
- Consent is sought to enable the future owners of each lot to establish their vehicle crossings, install a water supply connection or relocate other services within 2m of a street tree planted within the subdivision. This is required as these works are undertaken as part of the construction of each

dwelling, after the trees have been planted. These works will occur without the supervision of an arborist.

Subdivision under the NES

- An application for subdivision and soil disturbance under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) is also required.

221(3) application:

- s221(3) is being applied for to remove any existing consent notices on Lot 2 DP 82392 (Application site). The consent notice on Lots 3 and 4 DP 82392 will remain on their respective titles (Lots 30 and 40 hereon).

In regard to this application I note the following:

- I visited the site on the 8th February 2021;
- The site is located within the Halswell West Outline Development Plan;
- The existing right of way and associated services easements on the site are proposed to be surrendered as the area will become a local purpose access reserve. The applicant advises that a formal legal agreement has been reached with the neighbouring owners of the Right of Way where their land involved with this application will be sold to the applicant. The applicant will be undertaking investigations to determine the services of Lots 30 and 40 and if required providing additional connections to allow these allotments to remain serviced; and
- The applicant has noted that a small stand of trees is proposed to be retained within the local purpose utility reserve. They have accepted a condition in regard to this.

Description of site and existing environment

The application site and surrounding environment are described in sections 3 and 4 of the AEE submitted with the application. I adopt the applicant's description and note the following additional points:

- The application site is in a newly established greenfield development area which contains a mix of fully developed and undeveloped land parcels;
- To the west of the site is zoned open space natural and rural urban fringe;
- Directly south west of the site, the upstream waterway Knight Stream is adjoining the site;
- The adjoining road Kruger Road is classified as a local road. Whincops Road is classified as a collector road; and
- There are no significant trees, designations or sites of cultural/heritage significance within the application site and surrounding environment.

Relevant rules and activity status

Christchurch District Plan

The site is zoned Residential Suburban.

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
6.6.4.3 RD1 waterway setback earthworks.	n/a	Any earthworks within a waterway setback is classified as a restricted discretionary. The proposal includes earthworks within the 10 metre waterway setback of Upstream waterway Knights Stream.	6.6.7.1 – Natural Hazards 6.6.7.2 – Natural Values 6.6.7.3 – Amenity and Character 6.6.7.4 – Cultural Values 6.6.7.5 – Maintenance access 6.6.7.6 – Public/Recreational Access	No clause
7.4.2.3 RD1	7.4.3.7 Access design	Appendix 7.5.7 requires a maximum access width of 4.5m at the road boundary,	7.4.4.10 - Vehicle access design	Must not be limited or publicly

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>and clear visibility above 1m within a triangle measured for a width of at least 1.5m either side of the entrance, and for a length of at least 2m measured from the road boundary.</p> <p>The proposed allotments do not contain complying visibility splays:</p> <ul style="list-style-type: none"> - The right of way serving Lots 5 and 6. - The right of ways serving Lots 12-14 <p>Appendix 7.5.7 requires access longer than 50m and with a formed width less than 5.5m to contain passing bays every 50 metres consisting of a 5.5m width.</p> <p>The right of way proposed for Lots 18 and 19 is 55 metres long and has not provided any passing bays.</p>		notified
8.9.2.3 RD1	8.9.2.1 P1 a. Earthworks volume and depth b. Depth of earthworks c. Earthworks gradient	<p>The proposed earthworks will exceed the 20m³ maximum volume in Table 9) - 6000m³ is proposed.</p> <p>The proposed earthworks will exceed the 0.6m maximum depth by 0.2 (0.8m proposed).</p>	8.9.4 Matters for discretion: 8.9.4.1 - Nuisance 8.9.4.3 - Land stability 8.9.4.6 - Amenity	8.9.1 a. - Must not be publicly notified
9.4.4.1.3 RD8	9.4.4.1.1. P12	<p>Earthworks within 5 metres of the base of any tree is a permitted activity if the work is undertaken or supervised of a works arborist employed or contracted by the Council or a network utility operator.</p> <p>Earthworks are proposed for constructing vehicle crossings and servicing installation. These works will be undertaken without the supervision of a work arborist employed by contracted by the Council.</p>	8.9.4 – Matters 1 and 3 9.4.6 a-e, g, i-o	No clause
14.4.1.3 RD25	14.4.2.9 Road boundary building setback	The future units located on Lots 15 and 16 are to be less than 4.5m from the road boundary - 3m setback proposed	14.15.17 - Street scene – road boundary setback, fencing and planting	Must not be limited or publicly notified
14.4.1.3 RD26	14.4.2.7 Minimum building setbacks from	The proposed fencing is located less than 1m from	14.15.3 - Impacts on neighbouring property	No clause

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
	internal boundaries and railway lines	the south eastern boundary - 0m setback proposed ¹	14.15.18 - Minimum building, window and balcony setbacks	

Note: The proposed fencing along the south eastern boundary will be a maximum height of 2.2-2.3 metres therefore will comply with recession planes.

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
5.5.2 C1	-	Any subdivision which creates a vacant allotment within the Liquefaction Management Area is classified as a controlled activity under Chapter 5	Location, size and design of allotments, structures, roads, access, services or foundations as they relate to the liquefaction hazard; Timing, location, scale and nature of earthworks as they relate to the liquefaction hazard; and Liquefaction hazard remediation methods. Criteria in 5.5.2 C1 b.	Shall not be limited or publicly notified.
8.5.1.3 RD2	8.6.8 Wastewater disposal	A wastewater capacity certificate has not been provided.	8.7.4 - General matters 8.8.6 - Servicing	8.4.1.1
8.5.1.3 RD2	8.6.1 Minimum net site area and dimension	Vacant allotments within the Residential Suburban Zone require a minimum dimension of 16m by 18m. The following allotments do not comply with this standard: - Lot 12 – minimum dimension 8.2 metres proposed Lot 13 – minimum dimension 8.0 metres proposed Lot 16 – minimum dimension 9.82 metres proposed.	8.7.4 - General matters 8.8.11 - Allotment net site area and dimensions	8.4.1.1
8.5.1.3 RD2	8.6.3 Access	Appendix 7.5.7 requires a maximum access width of 4.5m at the road boundary, and clear visibility above 1m within a triangle measured for a width of at least 1.5m either side of the entrance, and for a length of at least 2m measured from the road boundary.	8.7.4 - General matters 8.8.2 - Property access	8.4.1.1

¹ The retaining wall and fencing proposed along the south east internal boundary will be 2.2-2.3 metres in height. As this exceeds 1.8m in height, it is classified as a building under the District Plan. Fence lines are classified as accessory buildings under the District Plan. Rule 14.4.2.7 permits accessory buildings to be setback 0m from internal boundary if they are no longer than 10.1m in length. The fence line at this height will exceed this permitted length and is not setback 1 metres from the boundary.

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>Some proposed allotments do not contain complying visibility splays:</p> <ul style="list-style-type: none"> - The right of way serving Lots 5 and 6. - The right of ways serving Lots 12-14 <p>Appendix 7.5.7 requires access longer than 50m and with a formed width less than 5.5m to contain passing bays every 50 metres consisting of a 5.5m width.</p> <p>The right of way proposed for Lots 18 and 19 is 55 metres long and has not provided any passing bays.</p>		
8.5.1.3 RD2	8.6.4 Roads	<p>Local residential roads are required to have minimum legal width of 16 metres and 2 footpaths.</p> <p>The proposed roads do not comply as the proposed road to vest has a legal width of 15 metres and 1 footpath.</p>	<p>8.7.4 - General matters</p> <p>8.8.3 - Roads</p>	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 non-notification clause does not apply in this application as there are land use non-compliances which require a notification decision for the proposed subdivision.

Halswell West ODP

The site is located with the Halswell West Outline Development Plan which comprises of a diagram only. In terms of the site, the key ODP requirements are:

- To provide a pedestrian/cycle ways connection;
- The waterway adjoining the site is required to be an indigenous tree planting corridor and significant habitat corridor;
- A local road which runs parallel to the waterway is to be located north of the site. This road will need to be established on the site and connected to Kruger Road, north east of the site.

The compliance with the outline development plan is further discussed below.

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 for subdivision and disturbance of land. The discretion is limited to 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, 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.

Section 221(3)

It is proposed that the existing consent notice on the title of the application site is to be removed. These conditions are no longer relevant as the application site is to be fully developed and serviced. I consider that there are no adverse effects created by removing the current consent notice. This is treated as a discretionary activity in this report.

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 and associated land use are limited to the matters over which the Council has limited its discretion outlined in Chapters 6, 7, 8, 9 and 14 of the Christchurch District Plan.

In my opinion the effects of this proposal relate to subdivision design, servicing, transport effects, natural hazards, earthworks effects (and associated building setback non-compliances) and health of the land.

Subdivision design

The development creates non-compliances as outlined above which require the assessment of Rules 8.7.4, 8.8.11 and 14.15.17 in terms of subdivision design, compliance with the outline development plan, allotment size and design, and street scene amenity. The non-compliances include not achieving minimum dimensions on minimum allotments and reduction of a road boundary setback. Regardless of the non-compliances there is a broad discretion to consider a wide range of subdivision design and ODP matters for any greenfield proposal.

General matters of subdivision

Rule 8.7.4 outlines the general matters of subdivision which provides guidance to assess the proposal's subdivision design, hazard constraints, servicing and infrastructure, transport networks, open spaces, natural and cultural values and consent notices. I consider that the proposed subdivision is appropriate under these matters noting that:

- All allotments can contain permitted land use activities. While some allotments do not meet the minimum dimension requirements, I consider that the allotments are suitable for residential development;
- The dimensions and orientation of the allotments will provide opportunities for subsequent dwelling design to capture solar gain;
- As outlined below, the proposed allotments will not constrain the future development which could occur north of the site and the layout provides a walkable connection to follow through when future development occurs;
- The proposal is mainly in accordance with the outline development plan for Halswell West. This is further assessed below;
- The proposed boundaries have not been created as a result of natural topography, drainage, other features of the natural environment and sites of cultural significance as none of these matters are particularly relevant on this piece of land;
- Servicing conditions have been proposed to enable all allotments to be fully serviced;
- The proposal does not create any reverse sensitivity effects to any nearby national grid or electricity distribution lines;
- Corner allotments have appropriate corner rounding;
- The application site is not located within a site of cultural significance;
- The local purpose utility reserve and access reserve proposed has been sufficiently designed to facilitate an increased pedestrian connectivity within the ODP area; and
- Consent notices have been proposed for foundation design on future development of the sites created and for waterway conditions.

Overall I consider that the application has satisfied the requirements in Rule 8.7.4.

Minimum allotment size and dimension

The proposal does not meet minimum dimensions in terms of the following allotments:

- Lot 12 – minimum dimension 8.2 metres proposed.
- Lot 13 – minimum dimension 8.0 metres proposed.
- Lot 16 – minimum dimension 9.82 metres proposed.

I consider the effects to be **less than minor** for the following reasons:

- Due to the design of the allotments however they do not impinge on the useability of the lot;
- Each allotment exceeds the 450m² requirement and have sufficient dimension and area to establish permitted land use activities on the site;

- Most of the minimum dimensions are road boundary dimensions notwithstanding sites can create complying vehicle accesses;
- All allotments have solar gain opportunities due to their design and positioning; and
- The allotments were not created as a result of the sites of Ngāi Tahu cultural significance or existing built features of significance.

Street scene amenity

The applicant has proposed a building setback for the future buildings on Lots 15 and 16. A three metre setback is proposed while the rule requires 4.5 metres. This is to prevent the intrusion of the waterway setback in these allotments. This requires an assessment against matters of discretion Rule 14.15.17 "Street scene – road boundary building setback, fencing and planting". The reduced setback has the potential to detract from the coherence, openness and attractiveness of the site when viewed from the street.

I consider the effects to be **less than minor** due to following reasons:

- The application will still need to comply with the residential suburban rules including setbacks for garages facing the road. This avoids any potential issues of overhanging vehicles within the road frontage and pedestrian walkways as well as reducing the opportunity of garage dominance;
- The applicant has accepted a condition accepting a tree/shrubs to be located within the road boundary setback. This tree will be capable of achieving 4m in height at mature and shrubs up to a 1.8m in height;
- Three metres is adequate width for appropriate landscaping;
- The site are large enough to perform onsite manoeuvring and complying parking areas;
- The road boundary setback intrusion is located in the eastern area of the allotments. It is not likely that outdoor/living areas will be located within the setback or effected by the proposal;
- These effects are internal to the application site.
- Overall I consider the street scene amenity and overlooking opportunities will be retained; and
- It prevents adverse effects from occurring within the waterway setback.

Halswell West Outline Development Plan

The site is located within the Halswell West ODP. While the ODP does not have any written requirements the ODP outlines connectivity for the site and to the north. I consider that the proposal is in general accordance with the ODP for the following reasoning:

- The proposal provides pedestrian/cycle shared access via the local purpose access reserve (Lot 27). This has been accepted by the transport team;
- No intrusions are occurring within the waterway setback which does not restrict the naturalisation of the waterway from occurring in the future (the waterway is already held is a 12m wide land parcel);
- The proposal provide an extension to Kruger Road and also a road connection to the north;
- While the site does not provide a road connection along the waterway, the northern connection provides the potential for this road connection to occur in this location in the future;
- The proposal does not discourage or preclude residential development north of the site (in many respects it enables it which is a positive effect).

Other subdivision design matters

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:

- 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 residential 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.

Servicing

The servicing proposed in this application has been assessed by Council's specialists. In regard to water and sewer the proposal has been accepted by Council's Team Leader Asset Planning Michele McDonald and

Senior Stormwater Planning Engineer Brian Norton. Ms McDonald and Mr Norton have recommended conditions which the applicant has accepted.

Rule 8.6.8 requires that a wastewater capacity certificate is provided to confirm that the 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 no effects in this instance.

Transport Effects

The proposed creates the following transport non-compliances:

- No passing bays are proposed for the ROW serving Lots 18 and 19;
- The visual splay for the right of way serving Lots 5 and 6 and 12-14 does not comply with Appendix 7.5.7; and
- The proposed road has a legal width of 15 metres and one footpath while a minimum legal width of 16 metres and 2 footpaths.

The relevant matters of control and discretion are listed in clauses 7.4.4.10, 8.7.4, 8.8.2 and 8.8.3.

The application has been assessed by Council's Transport Engineer Mike Calvert. He accepts the preliminary design of the subdivision and proposed road widths. Mr Calvert recommends the Kruger Road extension shall have a formed carriageway width which matches Kruger Road as a condition. The applicant has accepted this as a condition.

The applicant has provided the following assessment in terms of the visual splay and passing bay non-compliances:

- While the length of Lot 18/19 is 55 metres, Lot 18 is likely to enter the lot at the southern boundary (35 metres up the right of way). The remaining 25m will be used to service Lot 19;
- The right of way has a legal width of 4m while the Lots 12-14 access way has a 5 metre legal width which is near compliant to the permitted passing bays;
- Lots 5 and 6's right of way is setback over 6 metres from the footpath and 10 metres from the road formation and is adjacent to the local purpose utility reserve which does not contain any vehicular access;
- Lots 12-14 is setback over 5 metres from the footpath and 7 metres from the road. The above distances provide an adequate space for a vehicle to stop before any pedestrian conflict exists.

I accept the applicant's assessment and consider the effects to be **less than minor**.

Natural Hazards

The site is located within the liquefaction management area. This is further discussed in the s106 assessment below.

Earthworks

The proposed earthworks create an exceedance of earthworks in both Chapters 6.6 and 8.9 of the District Plan. I consider the primary effects relate to nuisance, land stability, amenity and natural values. The proposed works have the potential to create nuisance effects which include dust, sedimentation, erosion, change of drainage patterns, effects on ground water 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 can further exacerbate these nuisances. I consider that most nuisance effects can be controlled via conditions.

Specialist input has been obtained Councils Subdivision Engineer Peter Megarry. Mr Megarry has provided the following comments

"The application states earthworks are proposed within lots, and for roading and servicing, consisting of cut and fill in the order of 6000m³, max cut 0.8m. The geotech report refers to required ground improvement works which involve excavating and filling a 7m strip to 2m depth over approximately 140m within the 10m setback from Knights Stream. This equates to approximately 2000m³ of cut and 2000m³ fill. Given this is deeper than depth of excavation mentioned in the main body of the report I assume these volumes are not included in the 6000m³. Boundaries consist of retaining fill up to 0.5m and existing batters. The site naturally slopes towards the north eastern corner. To avoid having to import large quantities of fill material and ensure runoff falls away from the Knights Stream Reserve, the general direction of this existing slope will be maintained."

Mr Megarry has proposed conditions to mitigate any earthwork effects in terms of nuisance. In terms of amenity, all internal boundary with exception to the north and south eastern boundaries will be retaining

existing ground levels. The north boundary will have lower levels due to the road formation proposed. This does not create a concerns for amenity and drainage on the neighbouring properties.

Along the south eastern internal boundary, the ground levels will be filled between 0.2 to 0.5 metres in height. A subsoil drain is proposed along this boundary to prevent any drainage effects occurring on the south eastern neighbouring properties. As a result a retaining wall and fence line totalling (up to 2.3 metres in height) is proposed along this boundary which triggers a building setback intrusion. While the filling could create a potential effect of privacy and overlooking effects, the increase in fencing height prevents this as the occupants of the new residential allotments will have a fencing height of 1.8m which is anticipated in a residential zone and limits overlooking. The other effects potentially created are visual bulk and outlook. I note the most significant filled areas are Lots 6-7 which border three neighbouring properties. Most of the adjoining areas in the neighbouring properties are not primarily outdoor areas but are where accessory building and vegetation are located. While the trees in this area may be affected by the proposed earthworks, I do not consider that this will create an adverse effects on neighbouring properties as the trees are not classified as significant and potential damage will be limited. I consider that a fence line has lesser effect than of an accessory building at a higher height with a setback of 0m which could occupy the boundary of each allotment for a length of 10.1 metres. As there are multiple boundaries present, I consider there is adequate separation to prevent visual bulk from being created of the fenceline. The fill along the boundary is mostly less than I consider the effects on amenity and drainage to be **less than minor**.

In terms of earthworks within the waterway setback, specialist input has been obtained from Council's Surface Water and Land Drainage Planner. The earthworks required within the waterway setback are required for TC3 remediation. The applicant has proposed future building setback and fencing restrictions on the relevant lots to assist in providing mitigation for the earthwork intrusion and minimize future effects on the waterway. The natural variation along the bank to is to be retained. Mrs Tredinnick has commented that provided the erosion and sediment control is well managed, the earthworks to remediate the banks of the stream will be acceptable. I adopt Ms Tredinnick's assessment. I consider that the structures in the waterway will not impede the capability of waterway channels or displace to adjacent properties, create a flooding risk or further exacerbate the above nuisances.

Overall I consider the effects of the earthworks to have a **less than minor** effect.

Effects on Street Trees

Rule 9.4.4.1.1 P12 allows for works within the five metre setback to the base of any tree in parks, public open space or road corridors in the Christchurch City, provided that the work is undertaken by or under the supervision of works arborist employed or contracted by the Council or network utility operator.

Consent is sought to enable excavation associated with the construction of future vehicle crossings to be undertaken without arborist supervision within the street tree setback (excluding Sutherlands Road). These could be formed at the time of the construction of a dwelling and not in association with the subdivision. The construction of vehicle crossings is not to occur at this stage to allow location flexibility for future owners. If a vehicle crossing is located within close proximity to a tree's dripline. It can impact on the integrity of the tree.

It is noted that the trees at the time of planting are not mature being between 2.5 metres to 3.5 metres in height and are held in 80 litre bags with an estimate root span of 1 metre at the time of planting. It usually anticipated that buildings will be established closely (within 1-2 years) after titles have been issued for the subdivision. It is therefore unlikely that any tree roots would be encountered at this time.

Most vehicle crossings will meet the permitted earthworks standards in Chapter 8.9 of the District Plan. The applicant has volunteer conditions to mitigate the effects of street trees. Notwithstanding the applicant has noted that earthworks will not occur within 2 metres from the trunk of any adjoining street trees. This will generally ensure that the roots are not affected by the works. Due to the reasoning above, I consider the effects to be **less than minor** and the effects are limited to the site which the applicant has given written approval inherent to this application.

Health of the land

The site has not been identified as a HAIL under the LLUR however a detailed site investigation has been conducted on the site. This investigation identified risks of contamination from heavy metals, PAHs and TPH from current and historical activities such as;

- A burn drum
- Waste oil drums
- Storage of treated timber
- Storage of tires
- Storage and possible historical dismantling of vehicles.

The MEL report recommended three remediation options: (1) leaving the contaminated soils in-situ; (2) mixing contaminated soil with clean soil to dilute the contaminant concentrations; and (3) excavating and removing all contaminated soils and disposal to an approved landfill or location. The applicant has chosen to proceed with option 3.

Specialist input has been obtained from Council's Senior Environmental Health Officer Isobel Stout. She has noted that a small area of the site is above residential land use standards in terms of lead. This makes the subdivision and earthworks a restricted discretionary activity. The application includes a remediation action plan (RAP) however the s224 is contingent on the receipt of the site validation report. Mrs Stout has recommended this as a condition of consent. I adopt Mrs Stout's assessment and the applicant has accepted this. I consider the effects on the health of the land to be **less than minor**.

Section 221(3)

It is proposed that the existing consent notice on the title of the application site are to be removed. These conditions are no longer relevant as the application site is to be fully developed and serviced. I consider that there are no adverse effects created by removing the current consent notice. I note the applicant has agreed of the removal of the existing consent notices. I consider the effects to be less than minor.

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 proposal has non-compliances that require a notification decision. I consider the effects of these non-compliances are **less than minor**. I therefore recommend that this consent is processed as non-notified application. I also consider the effects to be appropriate.

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.

Recovery Plans and Regeneration Plans

Section 60(2) of the Greater Christchurch Regeneration Act 2016 requires that decisions and recommendation on resource consent applications are not inconsistent with Recovery Plans and Regeneration Plans. For restricted discretionary activities, Section 60(5) states that such plans are a matter over which discretion is restricted and that section 87A(3) of the RMA applies accordingly.

There are no Recovery Plans or Regeneration Plans relevant to this application.

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

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, 8.2.3, 8.2.3.2, 8.2.3.3 and 8.2.3.4.

The proposed allotments are suitable for the anticipated land use of residential activity as discussed previously in this report. I consider the proposal to be in general accordance with Halswell West ODP. I consider the proposal to be consistent with the objectives and policies of Chapter 8.

Residential

The relevant policies of Chapter 14 are Policies 14.2.1, 14.2.1.1, 14.2.4, 14.2.4.1 and 14.2.4.4.

Although the development application has not proposed any residential dwellings it has provided the basis on which good residential development can occur. Overall the proposal is consistent with the objectives and policies of chapter 14 of the District Plan.

Earthworks

The objectives and policies for earthworks focus on ensuring earthworks will not increase the risks of hazards, increase of effects on neighbouring properties or water quality/ground water, amenity values and does not cause risk to the health and safety of people. The relevant objectives and policies in regards to this proposal 8.2.4, 8.2.4.1, 8.2.4.4, 8.2.5.1, 8.2.5.2 & 8.2.5.3.

The purpose of the earthworks for this subdivision is to shape the allotments to drain back to front onto associated right of way. Conditions have been proposed to ensure effects in regards to nuisance, shading, visual impact and loss of privacy are reduced. I consider the proposal to be consistent with the objectives and policies of Chapter 8.9.

Natural Hazards

The relevant objectives and policies of Chapter 5 are 5.2.2.1.1, 5.2.2.1.2, 5.2.2.1.3, 5.2.2.1.4, 5.2.2.1.8, 5.2.2.1, 5.2.2.3.1. These policies ensure no development occurs in places where effects of a natural hazards are unacceptable. The objectives and policies also provide guidance with managing and assessing natural hazards. As outlined in the s104 and 106 assessment, the adverse effects of natural hazards are less than minor and the proposal is consistent with the objectives and policies of Chapter 5.

Transport

The relevant objectives and policies of Chapter 7 are 7.2.1 and 7.2.1.3. As outlined in the s95/104 assessment above I consider that the vehicle accesses and road is appropriate and ensures the safety and efficiency of the transport system. I consider the proposal is consistent with the objectives and policies of Chapter 7.

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 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.

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 law², 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

- (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).*

This section of the Act is particularly relevant in relation to geotechnical concerns following the Canterbury earthquakes. The land is identified as being within the Liquefaction Management Area in the Christchurch District Plan and rule 5.5.2a applies as vacant allotments are being created. The land is classified by CERA as Technical Category 3 where moderate to significant land damage from liquefaction is possible in future significant earthquakes.

The applicant has submitted a geotechnical report prepared by KGA Geotechnical Group Limited which has been reviewed by Council's Subdivision Engineer Peter Megarry.

The geotechnical methodology included the following:

- detailed site and environs walkover inspection;
- review of New Zealand Geotechnical Database, Environmental Canterbury and Christchurch City Council Websites;
- Subsurface investigation comprising hand auger boreholes, scala penetrometer tests and cone penetrometer tests.

Mr Megarry has accepted the report's assessment and has recommended conditions geotechnical, ground improvements and applicable consent notices. The applicant has accepted these conditions. I accept Mr Megarry's assessment.

In terms of Lots 30 and 40 while they are potential lots for further development, both allotments contain existing dwellings. Usually geotechnical reports would be required for these lots. In this instance, I have not requested such a report out of practicality. The applicant has gone to a lot of effort to co-ordinate the integration of this land into a future integrated subdivision pattern by creating legal road and vesting reserve. More importantly, Mr Megarry in the knowledge of local geotechnical conditions considers that the land can be suitably remediated (if required) in the future if redeveloped. I have not recommended a consent notice on these lots for

² *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316

similar reasons and because with the existing dwellings it seems a certainty that they will be further subdivided (and subject to section 106) before any further building development.

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

PARTIAL CANCELLATION OF CONSENT NOTICE CONO5196643.4

- (A) That the application be processed on a **non-notified basis** in accordance with Sections 221(3) 95A-95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104B and 221 of the Resource Management Act 1991.

1. The consent notice will be partially cancelled against Lot 2 DP 82392 only.

Advice Note: The issue of a certificate under section 221(3) is contingent on the subdivision proceeding.

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.

Earthworks

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

Street Trees

3. This consent only allows works within 5m of the trunk of a street tree, within 5 years of the date of the title being issued for the lot to which the crossing applies.
4. Any earthworks within the legal road associated with the construction of a new vehicle crossing and to install water supply connections shall be setback a minimum of 2m from the trunk of any street tree.

Note:

The minimum separation distances between street trees and driveways specified in the Christchurch City Council [Infrastructure Design Standards](#) (IDS) must be adhered to (refer IDS 10.9.11 Location of trees in streets).

5. No other works or parking of vehicles or stockpiles or storage of materials are permitted within 5m of the trunk of a street tree, except that vehicles may park on the carriageway of the road.
6. Prior to the commencement of works, a temporary protective fence shall be erected around the tree at a minimum distance of 2m from the trunk of the tree, except that this can be reduced to 1.5m where the vehicle crossing is to be installed or to the edge of any sealed area (such as a footpath or kerb and channel).
7. The temporary protective fence shall be constructed of mesh material with a “post” system spaced at intervals of at least a metre apart and consisting of a type that has no underground strip footing.

8. The temporary protection fence shall be maintained at all times during the construction process. If the protective fencing is damaged it shall be repaired immediately.
9. No water used to wash down machinery (e.g. concrete mixers) likely to contain concrete or fuel shall be disposed of within 5m of the trunk of a street tree.
10. At the completion of works any exposed earth within the berm shall be reinstated and planted with grass.
11. Any person undertaking works within 5m of a street tree under this consent shall notify Christchurch City Council no less than five working days prior to works commencing, (email to rcmon@ccc.govt.nz) of:
 - a) The earthworks start date and the name and contact details of the site supervisor.
 - b) The temporary protective fence being erected (provide photographic evidence)
 - c) A schedule/list of activity.
12. Within 5 working days of sealing the vehicle crossing photographs of the site shall be taken and forwarded to rcmon@ccc.govt.nz.
13. The site manager shall keep a copy of this consent on site at all times and will be responsible for informing the labour force with regard to the conditions of the consent.

Road Boundary Setbacks

14. Any building on Lots 15-16 shall comply with all applicable operative District Plan rules at the date of issue of this consent with the exemption of the following:
 - a. A road boundary setback of 3 metres shall apply;
 - b. One tree capable reaching a height of 4m at maturity shall be planted in the 3 metre road boundary setback of Lot 15

All garages facing the road will be required to comply with the operative District Plan rules at the date of issue of this consent.

Monitoring

- 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 \$116.80 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.

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

- 1.1 The survey plan, when submitted to Council for certification, is to be substantially in accordance with the stamped approved application plan.

2. Local Purpose (Utility) and Local Purpose (Access) Reserve land

- 2.1 Lot 27 is to be vested as Local Purpose (Access) Reserve, and Lot 28 Local Purpose (Utility) Reserve.

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

3. New Road to Vest

- 3.1 The new road, being Lot 29, is to be formed and vested in the Council to the satisfaction of the Subdivision Engineer with underground wiring for electricity supply and telecommunications.
- 3.2 The Kruger Road extension shall have a formed carriageway that replicates the existing Kruger Road carriageway.

4. Engineering General

- 4.1 Should any existing water supply and sanitary sewer connections serving Lot 30 and Lot 40 be disestablished, new connections shall be provided prior to any disconnection taking place.

4.2 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).

4.3 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.

4.4 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

4.5 *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.

4.6 *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.

4.7 *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/>

4.8 *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

5. Water Supply

- 5.1 The point of water supply for the subdivision shall be the DN180 PE100 water main in Kruger Road. Water mains shall be extended along the full length of Roads to Vest, and terminated with hydrants as per the provisions of the Infrastructure Design Standard.
- 5.2 A new water supply connection to Lot 30 and Lot 40 shall be provided prior to any existing water connections being disconnected.
- 5.3 The water supply shall be designed by a suitably qualified person in accordance with the Infrastructure Design Standard and in general 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.
- 5.4 All water mains and submains for the subdivision shall be installed in road to be vested in Council.
- 5.5 As required in the Infrastructure Design Standard, all water mains within the development shall be a minimum DN180 PE100 diameter.
- 5.6 The construction of Council vested water infrastructure shall be carried out by a Council approved water supply installer at the expense of the applicant.
- 5.7 All lots shall be served with a water supply to their boundary.
Submains shall be installed to 1m past each lot boundary.
- 5.8 Any rear lot or lot within a R.O.W shall be serviced by its own lateral within a shared access. An easement for the right to convey water shall be created over the lateral in favour of the lot serviced by the lateral. Laterals shall be installed by a Licensed Certified Plumber and shall not cross the boundary of the net site area of other sites.

Advice Note: This will require a Building Consent unless the consent holder obtains a Building Consent exemption for the installation of the private laterals.

- 5.9 Where laterals are installed under a building consent exemption, construction shall be in accordance with the Construction Standard Specifications (CSS) and the Infrastructure Design Standard (IDS). Dummy connection boxes shall be installed at the entrance of the shared access or R.O.W. at the public road boundary or in the event that the water main is extended into the R.O.W, in an area set aside within the R.O.W and as close as possible to the terminal fire hydrant.

6. Sewer

- 6.1 The approved sanitary sewer outfall for the proposed 24 residential suburban allotments shall be the existing DN225 to the north in the private lane between Kruger Road and Whincops Road.
- 6.2 A new sanitary sewer connection to Lot 30 and Lot 40 shall be provided prior to any existing sanitary sewer connections being disconnected.
- 6.3 The subdivision shall be serviced by a gravity sewer system designed in accordance with Council's Infrastructure Design Standards and Construction Standard Specifications. Engineering drawings shall be sent to the Subdivisions Engineer for acceptance prior to the commencement of any physical work.
- 6.4 Sanitary sewer laterals shall be laid to at least 600mm inside the net site area of all residential lots at the subdivision stage. The laterals will be installed at sufficient depth to ensure that adequate fall is available to serve the furthestmost part of the lots.
- 6.5 Where the number of lots exceeds the Building Act drainage discharge requirements for a 100mm common sewer pipe, a 150mm private common sewer pipe shall be installed.
- 6.6 Gravity network sewers to be vested in Council shall be a minimum of 150 mm diameter. Network sewers and connections to network sewers shall be installed by a Council Authorized Drainlayer at the expense of the applicant.
- 6.7 Private sewer laterals serving rear lots shall be installed under a Building Consent for each stage of the development by a Registered Drain Layer and the Code Compliance Certificate forwarded to Council's Subdivision Team as part of the Sec 224c application. Alternatively, the consent holder can seek Building Consent exemption for the installation of private laterals. Where the laterals are installed under a Building Consent exemption, construction shall be in accordance with the Construction Standard Specifications and the Infrastructure Design Standard.
- 6.8 Where private sewers are laid through private property or R.O.Ws, relevant private easements for the right to drain sewage shall be acquired by the applicant.

7. Stormwater

- 7.1 The stormwater management system shall be comprised of channels, sumps, pipes and/or, swales. In addition to the below conditions, the system shall meet the requirements of the CCC Waterways, Wetlands and Drainage Guide (WWDG 2003/2011/2012), the Infrastructure Design Standard (IDS 2018) and the Construction Standard Specifications (CSS 2018).

Advice Note: Lots 30 and 40 currently discharge onsite and this will remain unchanged in this application.

- 7.2 The consent holder shall demonstrate that authorisation for operational and construction phase stormwater discharge has been obtained from Christchurch City Council, otherwise separate authorisation from Environment Canterbury shall be obtained.
- 7.3 Unless otherwise approved by Council Engineers, stormwater generated from all roofs, roads and hardstanding areas within all allotments shall be collected via channels, sumps, pipes or swales and discharged into the Christchurch City Council stormwater mitigation facility at 70R Murphys Road ("Longhurst Stormwater Basins").
- 7.4 The filling of land shall not cause adverse flooding effects on other land. The consent holder shall provide a report summarizing any effects such as disruption of overland flow caused by earthworks within or outside the site, and identify all measures proposed to avoid, remedy or mitigate those effects. This report shall form part of the Engineering Design Report.

- 7.5 The surface water management system shall be designed to ensure complete capture and conveyance of all stormwater runoff from the site and all upstream contributing catchments (assuming Maximum Probable Development) 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. A combination of primary and secondary conveyance systems may be used to ensure this level of service is achieved.
- 7.6 The primary stormwater reticulation network shall be designed to convey (at minimum) the stormwater generated from all contributing catchments for 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.
- 7.7 Stormwater laterals are to be laid to at least 600mm inside the boundary of all lots at the subdivision stage. Unless otherwise approved by Council Engineers, the laterals are to be laid at sufficient depth to ensure protection and adequate fall is available to serve the furthestmost part of the lot.
- 7.8 Any subsoil drainage is used to permanently manage groundwater levels within the development shall be designed in accordance with WWDG Chapter 5.
- 7.9 The consent holder shall submit an Engineering Design Report for acceptance by 3 Waters and Waste and Resource Consents Units. 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 systems.
- 7.10 The designer of the surface water management system shall provide a report which identifies all overland flow paths proposed for storm events that exceed the capacity of the stormwater management and mitigation system. All overland stormwater flow paths are to be identified and protected by an easement in favour of Christchurch City Council, if required.
- 7.11 The consent holder shall provide easements in gross over all stormwater infrastructure or overland flow paths located outside of legal road or utility reserve areas to be vested with Council. The proposed stormwater pipeline located along the southern site boundary shall be protected with a 3m wide easement in gross. The existing twin 450mm uPVC pipelines along the north/west site boundary of Lots 19 and 20 shall be protected by a 5m wide easement in gross.
- 7.12 The consent holder shall operate all stormwater infrastructure to vest into Council for at least 12 months following the issue of the Section 224(c) certificate, after such time Council may accept responsibility for operation and maintenance.
- 7.13 The consent holder shall provide as-built plans of the stormwater management systems 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.

8. Access Construction Standards

- 8.1 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.

9. Street Lighting

- 9.1 Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

10. Engineering Plans

- 10.1 Engineering plans for the construction of the new road, access to rear lots, 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.

10.2 Engineering works are to be installed in accordance with the approved plans.

11. Health of Land

11.1 Site remediation shall be carried out in strict accordance with the "Soil Contamination Risk Detailed Site Investigation Report and Remediation Action Plan" prepared by Malloch Environmental Ltd, dated 21 September 2020 (74 pages of approved consent documents)

11.2 Council is to be notified at least 5 working days in advance of the earthworks commencing. This may be by way of email to rcmon@ccc.govt.nz.

11.3 Within three (3) months of the completion of the earthworks a Site Validation Report (SVR) shall be prepared and submitted to Council.

The SVR shall include as a minimum

- Volumes of materials moved on site;
- Details of any variations to the proposed work plan;
- Details of any discharges or contingency measures employed during the earthworks;
- Photographic evidence of the site works;
- Evidence the objectives of the final site remediation have been met with regard to residential land use.
- Evidence of the disposal of any soils off site to an authorised facility.

..... 11.4 The SVR shall be written in accordance with the Ministry for the Environment Guidelines for Reporting on Contaminated Sites in New Zealand (revised 2011). Delivery of the SVR may be by way of email to rcmon@ccc.govt.nz.

12. Plans for Geodata Plot

12.1 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.

13. Filled Land

13.1 All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for earthfill for residential purposes NZS 4431:1989. A duly completed certificate in the form of Appendix A of NZS 4431 shall be submitted to Council for all lots within the subdivision that contain filled ground.

13.2 The construction details of the retaining wall required to retain fill are to be submitted to the Subdivisions Engineer for approval. The wall construction and materials are to be certified in addition to the NZS 4431 certification for fill.

13.3 The consent holder is to submit a report and calculations detailing the filling proposed against existing boundaries and the implementation of mitigation measures proposed to avoid adverse effects on adjoining properties.

14. Earthworks

14.1 Earthworks shall be in accordance in Plans 3 to 5.

14.2 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 EMP will require formal acceptance by Christchurch City Council's Subdivision Engineer (via email to rcmon@ccc.govt.nz) prior to any work starting on site.

14.3 The EMP shall be designed by a suitably qualified person and a design certificate ([Appendix IV in IDS Part 3](#)) supplied with the EMP for acceptance at least 5 working days prior to the works commencing. 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/>.

14.4 The EMP 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;
- Stabilised entrance/exit and any haul roads;
- Site laydown and stockpile location(s) and controls;
- 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.

Advice Note:

Any changes to the accepted EMP must be submitted to the Council in writing following consultation with the Council's Subdivision Engineer. The changes must be accepted by the Subdivision Engineer prior to implementation.

14.5 The accepted EMP shall be implemented on site over the construction phase. No earthworks shall commence on site until:

- The Council has been notified (via email to rcmon@ccc.govt.nz) no less than 3 working days prior to work commencing, of the earthworks start date and the name and details of the site supervisor.
- The contractor has received a copy of all resource consents and relevant permitted activity rules controlling this work;
- the EMP has been installed;
- an Engineering Completion Certificate ([Appendix VII in IDS Part 3](#)), signed by an appropriately qualified and experienced engineer, has been submitted to the Council. This is to certify that the erosion and sediment control measures have been properly installed in accordance with the accepted EMP.

14.6 Any public road, shared access, footpath, landscaped area or service structure that has been damaged, by the persons involved with the development or vehicles and machinery used in relation to the works under this consent, shall be reinstated as specified in the [Construction Standard Specifications](#) (CSS) at the expense of the consent holder and to the satisfaction of the Council.

- 14.7 Any change in ground levels shall not cause a ponding or drainage nuisance to neighbouring properties. All filled land shall be shaped to fall to the road boundary. Existing drainage paths from neighbouring properties shall be maintained. Following the completion of the filling and associated work an engineering report including a finished section level as built, with retained wall height and slope batter details, shall be submitted to the Subdivision Engineering Section of the Council. This report must be undertaken by a suitably qualified engineer. The information contained in this report will be placed on the property record. Note: Particular attention is required along the southeast boundary.
- 14.8 Earthworks involving soil compaction methods which create vibration shall comply with German Standard DIN 4150 1999-02 (*Structural Vibration – Effects of Vibration on Structures*) and compliance shall be certified via a statement of professional opinion from a suitably qualified and experienced chartered or registered engineer. The statement of professional opinion is to be submitted to the Christchurch City Council via rcmon@ccc.govt.nz a minimum of five working days prior to any compacting activities commencing.
- 14.9 The earthworks and construction work shall be under the control of a nominated and suitably qualified engineer.
- 14.10 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 over 0.5m high shall be included and certified as part of the Earth Fill Report in condition 14.11.
- Note:
- a. *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.*
 - b. *This report may be presented as part of the Design Report for the subdivision works under condition 14.11.*
- 14.11 All filling exceeding 300mm above excavation level shall be in accordance with NZS 4431:1989 Code of Practice for Earth Fill for Residential Development. At the completion of the work an Earth Fill report including a duly completed certificate in the form of Appendix A of NZS 4431 shall be submitted to the Council at rcmon@ccc.govt.nz so that the information can be placed on the property record. This report shall detail depths, materials, compaction test results and include as-built plans showing the location and finished surface level of the fill.
- 14.12 No construction work, other than maintenance of dust and erosion and sediment control measures, shall be undertaken on Sundays, Public Holidays or outside the hours of 7.30am to 6.00pm Monday to Saturday, without the Council's prior consent.
- 15. Minimum Levels**
To be considered satisfactory for sewer and stormwater drainage minimum ground levels shall be based on a level of 100mm above the kerb at the street frontage and right of way, plus a grade of 1:300 to the rear boundary.
- 16. Filling**
- 16.1 All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for earthfill for residential purposes NZS 4431: 1989. A duly completed certificate in the form of Appendix A of NZS 4431 shall be submitted to the Council for all lots within the subdivision that contain filled ground, prior to the issue of a Section 224 Conditions Certificate.
- 16.2 The consent holder is to submit a report and calculations detailing any filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties.
- 16.3 The construction details of any retaining wall required to retain the fill are to be submitted to the Subdivisions Engineer for acceptance. The wall construction and materials are to be certified in addition to the NZS 4431 certification.
- 17. Greenspace**
- 17.1 *Reserve Landscape Plans*

Landscape Plans for Reserve land (Lots 27 and 28) are to be submitted to the Technical Design Services (Parks and Landscapes Team) 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, the Parks Unit (Parks Policy and Advisory Team) is required to agree to the value of the assets. If the Parks Unit (Parks Policy and Advisory Team) 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 Parks Unit (Parks Policy and Advisory Team).

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.

The Consent holder shall maintain plants/trees on Reserve land (Lots 27 and 28) for the **24 months** Establishment Period (Defects Maintenance), until a final inspection and acceptance of the landscaping by Council. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes (current version).

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)).

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.

The Consent holder shall enter into a separate bond with Technical Design Services (Parks and Landscapes 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 Unit staff.

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.

17.2 *Street Tree Landscape Plans*

Street tree landscape plans are to be submitted to the Technical Design Services (Parks and Landscapes Team) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.

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).

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.

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)).

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).

The Consent Holder shall enter into a separate bond with Technical Design Services (Parks and Landscapes 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.

Any replacement plantings and establishment period required due to trees not being accepted are to be carried out at the Consent Holder's expense.

17.3 Final Completion / Handover (Reserves and Street Trees)

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.

17.4 As – Builts (Reserves and Street Trees)

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**.

17.5 Existing trees in the proposed reserves to vest

The consent hold shall appoint a council approved arborist is to inspect and complete any remedial work required on the existing trees located within Lot 28, at the consent holder's expense. A report shall be provided to the Council Parks Team outlining the condition of the trees for approval prior to undertaking the remedial work."

18. Waterways

18.1 The 10 metre wide waterway setback shall be illustrated on the title plan as Area XX to YY at the time of 223 certification.

18.2 In regard to Lots 13-16, 18 and 19, any development or works shall meet the following requirements

- No structures or buildings are permitted in Area A to F; and
- Any future fencing in Area A to F shall be limited to open style fencing (no more than 20% solid structure) and setback 3 metres from the bank of the waterway.

Condition 18.2 is an ongoing condition of consent which will be imposed as a consent notice.

19. Telecommunications and Energy Supply

19.1 All lots shall have telecommunications and electrical supply laid to the net site area of each lot.

19.2 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.

19.3 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.

20. Right of Way Easements (Private Ways)

20.1 The rights of way easements as set out on the application plan shall be duly granted or reserved.

21. Service Easements

21.1 The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.

- 21.2 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.

22. Existing Easements over areas of Roads to Vest

- 22.1 The portion of the existing easements shown on the stamped approved plan that extend over the road to vest are to be surrendered.

23. Easements over Reserves

- 23.1 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.

24. Existing easements under reserve to vest

- 24.1 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.

25. Easements in Gross

- 25.1 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.

26. Road and/or Lane Names

- 26.1 The new roads are to be named.

- 26.2 A selection of names in order of preference is to be submitted for each new road. For historical purposes a brief explanation of the background for each submitted name is preferred. The names are to be in accordance with the Council's Policy on Naming of Roads and Rights of Way dated 2 November 1993.

- 26.3 The allocated names when approved are to be shown on the survey plan submitted for certification.

Advice Note: Road names are required to be approved by the Community Board. Community Board meetings are only held approximately once a fortnight, however Council Reports need to be completed two weeks prior to the meeting date. It would be in your interest to start the naming process early so that this process does not hold up this development as it can take up to six weeks. To request a road name, find the form and more information at <https://ccc.govt.nz/consents-and-licences/resource-consents/subdivision-consents/road-and-right-of-way-naming/>

- 26.4 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.

- 26.5 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.

27. Amalgamations

- 27.1 The following amalgamation condition has been approved by Land Information New Zealand. The condition is to be included in the digital Title Plan dataset.

"That Lot 25 hereon be transferred to the owners of Lot 1 DP 20464 (RT CB1C/380) and that one record of title be issued to include both parcels (CSN Request 1704420)"

“That Lot 26 hereon be transferred to the owner of Lot 3 DP 67573 (RT CB39C/435) and that one record of title be issued to include both parcels (CSN Request 1704420)”

LINZ request No: 1704420

28. Geotechnical

- 28.1 All liquefaction hazard and lateral spread mitigation on site shall be designed in accordance with the recommendations in the Geotechnical Investigation Report K200637-2 18/02/2021 provide as part of the application.
- 28.2 All infrastructural assets to be vested in the Council shall be designed and constructed in accordance with the Infrastructure Design Standard (IDS) 2018 and the Construction Standard Specifications (CSS).
- 28.3 Asset structures shall include but not be limited to gravity and pressure pipelines, manholes, chambers, valves, hydrants, stormwater treatment devices, culverts or any other physical asset to be vested in Council including road pavements. Bridges and pump stations shall be designed to importance level 3 (IL3) as defined in NZS 1170.
- 28.4 In addition to the above, to be considered suitable in terms of section 106(1A)(a) and (b) of the Resource Management Act, all proposed infrastructure shall be designed to resist the effects associated with earthquake induced liquefiable soils and lateral spread from a seismic event as defined in condition 28.5.
- 28.5 To mitigate liquefaction (vertical settlement) hazards and lateral spread (horizontal displacement), any proposed asset structures shall be designed for a seismic event with a 25 year return period under the serviceability limit state (SLS) event and with a 500 year return period for the ultimate limit state (ULS) event as defined by NZS 1170.5:2004.

Beyond a SLS seismic event, it is recognised asset structures may become progressively less serviceable.

28.6 Ground Improvement

Site earthworks and remediation shall be carried out to improve the ground performance in terms of the MBIE guidelines ‘Repairing and rebuilding houses affected by the Canterbury earthquakes’ (3rd Edition 15 March 2017) or subsequent revisions. Ground performance shall achieve a minimum technical categorisation on all residential lots equivalent to TC2. The technical category will be confirmed in the Engineers Report prepared for the section 224(c) certificate under condition 28.8.

28.7 Consent Notice

That a consent notice in terms of Section 221 of the Resource Management Act be registered on the titles for all lots that are categorised in the Final Geotechnical Report as TC2 land:

“Any structure requiring a Building Consent, in terms of Building Act provisions, shall have specific foundation design by a suitably experienced chartered engineer or by an appropriately qualified geotechnical engineer. The design shall take into consideration the potential for liquefaction and associated effects (vertical settlement and lateral spread) appropriate for Technical Category 2 land and shall be investigated and designed in accordance with MBIE Guidelines ‘Repairing and rebuilding houses affected by the Canterbury earthquakes’ (3rd Edition 15 March 2017) or subsequent revisions.”

Note: These requirements are contingent upon TC1 and TC2 land equivalence being achieved by the proposed earthworks and remediation works.

Note: This is an ongoing condition of Consent for which a consent notice pursuant to s221 of the Resource Management Act will be issued. Lots 30 and 40 are excluded from the consent notice.

28.8 Geotechnical Completion Report

Prior to the request for the section 224 certificate the Consent Holder shall supply a Final Geotechnical Report on the mitigation measures put in place during the construction phase to minimise both the liquefaction and lateral spread potential of the land during the SLS and a ULS seismic event in condition 28.5. The report shall recommend the Technical Category of the land in

terms of the MBIE guidance document 'Repairing and Rebuilding Houses Affected by the Canterbury Earthquakes' and include a Statement of Professional Opinion on the Suitability of Land for Building Construction, using the template in IDS Part 4 Appendix II.

29. Consent Notice

- 29.1 The following consent notice pursuant to Section 221 of the Resource Management Act 1991 will be issued by the Council:

Lots 13-16, 18 and 19 - Waterways

In regard to Lots 13-16, 18 and 19, any development or works shall meet the following requirements:

- No structures or buildings are permitted in Area A to F; and
- Any future fencing in Area A to F shall be limited to open style fencing (no more than 20% solid structure) and setback 3 metres from the bank of the waterway.

Lots TBC – Geotechnical

Any structure requiring a Building Consent, in terms of Building Act provisions, shall have specific foundation design by a suitably experienced chartered engineer or by an appropriately qualified geotechnical engineer. The design shall take into consideration the potential for liquefaction and associated effects (vertical settlement and lateral spread) appropriate for Technical Category 2 land and shall be investigated and designed in accordance with MBIE Guidelines 'Repairing and rebuilding houses affected by the Canterbury earthquakes' (3rd Edition 15 March 2017) or subsequent revisions.

Note: These requirements are contingent upon TC1 and TC2 land equivalence being achieved by the proposed earthworks and remediation works.

Note: Council will prepare the Consent Notice.

30. Goods and Services Taxation Information

- 30.1 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.

31. Lapsing of Consent

- 31.1 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

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.

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.

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.

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 CONTRIBUTIONS SUMMARY				PIM or Consent Ref:		RMA/2021/19		
Customer Name		Knights Stream Estates Limited		ASSESSMENT				
Project Address		60A, 60B & 60C Whincops Road						
Assessment Date		22/01/2021						
Assessment Summary								
		HUE Credits						
		Current	Assessed	Discounts	Assessed HUE After Discount	Change	DC Rate (incl GST)	DC Charge (incl GST)
<u>Activity</u>	<u>Catchment</u>	HUE A	HUE B	C	HUE D	HUE E	G	F= Ex G
Network Infrastructure								
Water supply	District-w ide	3.00	26.00	0.0%	26.00	23.00	\$2,395.45	\$55,095.35
Wastew ater collection	District-w ide	3.00	26.00	0.0%	26.00	23.00	\$6,349.15	\$146,030.45
Wastew ater treatment and disposal	District-w ide	3.00	26.00	0.0%	26.00	23.00	\$2,904.90	\$66,812.70
Stormw ater & flood protection	Halsw ell	3.00	26.00	0.0%	26.00	23.00	\$5,436.05	\$125,029.15
Road netw ork	Greenfield	3.00	26.00	0.0%	26.00	23.00	\$3,315.45	\$76,255.35
Active travel	District-w ide	3.00	26.00	0.0%	26.00	23.00	\$425.50	\$9,786.50
Public transport	District-w ide	3.00	26.00	0.0%	26.00	23.00	\$717.60	\$16,504.80
Total Community and Network Infrastructure								\$495,514.30
Reserves								
Regional parks	District-w ide	3.00	26.00			23.00		\$61,998.80
Garden and heritage parks	District-w ide	3.00	26.00			23.00		\$3,703.00
Sports parks	District-w ide	3.00	26.00			23.00		\$58,190.00
Neighbourhood parks	Greenfield	3.00	26.00			23.00		\$219,323.40
Total Reserve Contributions								\$343,215.20
GST 15%								\$109,399.50
Total Development Contribution								\$838,729.50

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:

Development Constraint	Council records show there is a specific condition on the use of this site: Consent Notice
District Plan	Property or part of property within the Liquefaction Management Area (LMA) Overlay which is operative.
District Plan	Property or part of property is within an Outline Development Plan area which is affected by specific provisions that are operative.
District Plan	This property or part of this property is close to at least one waterway. It may be within

	the setback for an Upstream Waterway. Within that setback, District Plan rules apply to activities including buildings, earthworks, fences and impervious surfacing. Any part of the property within the setback will be affected by those rules.
District Plan Zone	Property or part of property within the Residential Suburban Zone which is operative.
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).
Ecan Requirement	A resource consent or permit may also be required from the Canterbury Regional Council or other territorial authority, particularly with respect to water bodies managed by those authorities. Please refer to the relevant regional plan and any relevant bylaws, and contact the Christchurch City Council if you are uncertain which authority manages the water body in question.
Electoral Ward	Property located in Halswell Electoral Ward
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/
Ground Characteristic	Christchurch City Council holds indicative information on liquefaction hazard for Christchurch. Information on liquefaction, including an interactive web tool, can be found on the Council website at ccc.govt.nz/liquefaction . Depending on the liquefaction potential of the area that the property is in, the Council may require site-specific investigations before granting future subdivision or building consent for the property.
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	The Tonkin & Taylor Darfield Earthquake 4 September 2010 Geotechnical Land Damage Assessment & Reinstatement Stage 1 Report indicates areas of observed surface manifestations of liquefaction resulting from the earthquake. This property is within one of the identified areas. The report can be viewed at www.eqc.govt.nz/canterbury-quake/stage-one/stage1.aspx

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

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: 06/05/2021

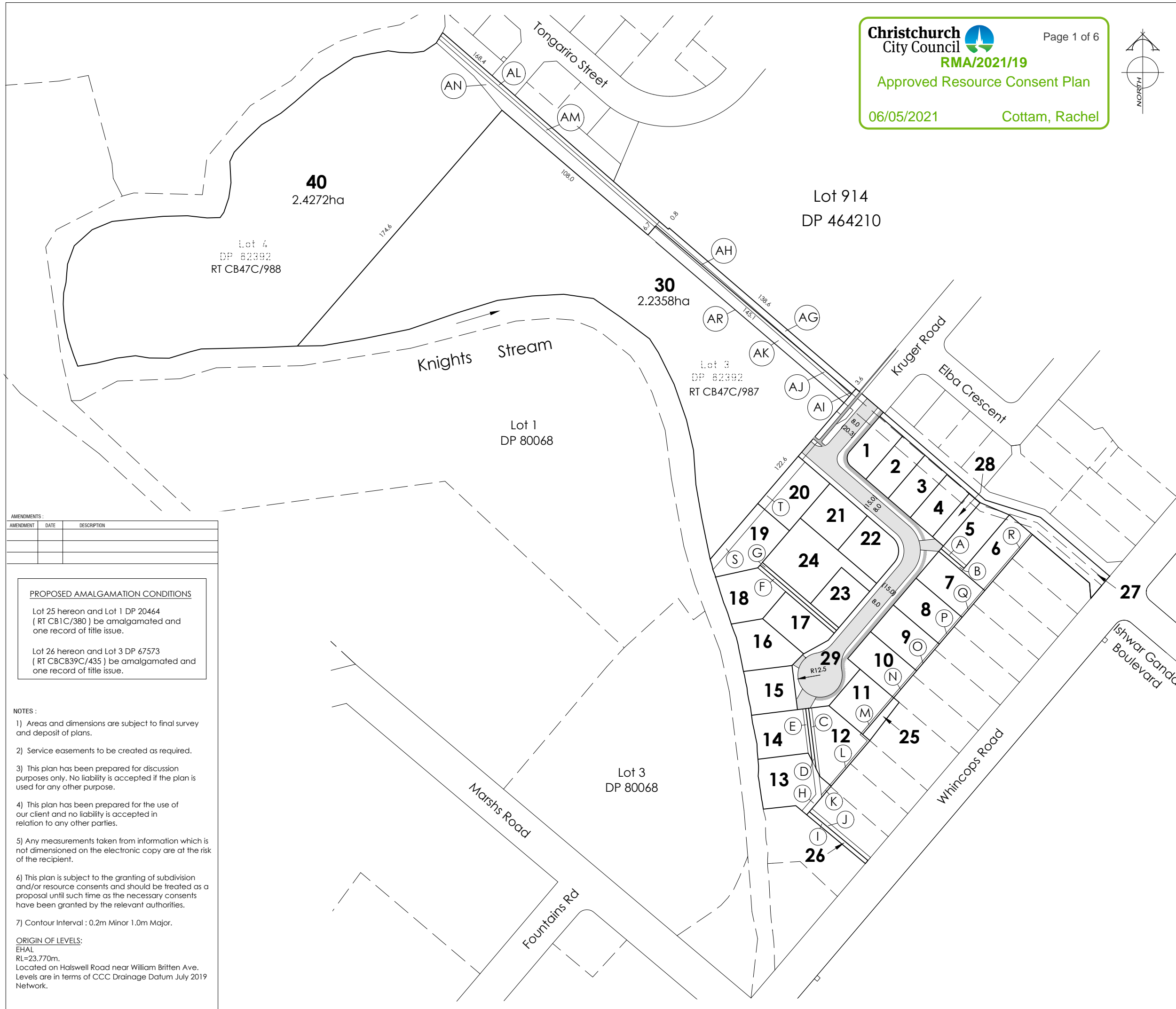
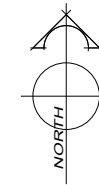
Decision

That the above recommendations be adopted for the reasons outlined in the report.

Delegated officer:



Paul Lowe
Principal Advisor Resource Consents
06/05/2021 12:59 PM



AMENDMENTS:

AMENDMENT	DATE	DESCRIPTION

PROPOSED AMALGAMATION CONDITIONS

Lot 25 hereon and Lot 1 DP 20464
(RT CB1C/380) be amalgamated and
one record of title issue.

Lot 26 hereon and Lot 3 DP 67573
(RT CBCB39C/435) be amalgamated and
one record of title issue.

NOTES:

- 1) Areas and dimensions are subject to final survey and deposit of plans.
- 2) Service easements to be created as required.
- 3) This plan has been prepared for discussion purposes only. No liability is accepted if the plan is used for any other purpose.
- 4) This plan has been prepared for the use of our client and no liability is accepted in relation to any other parties.
- 5) Any measurements taken from information which is not dimensioned on the electronic copy are at the risk of the recipient.
- 6) This plan is subject to the granting of subdivision and/or resource consents and should be treated as a proposal until such time as the necessary consents have been granted by the relevant authorities.
- 7) Contour Interval : 0.2m Minor 1.0m Major.

ORIGIN OF LEVELS:

EHAL
RL=23.770m.
Located on Halswell Road near William Britten Ave.
Levels are in terms of CCC Drainage Datum July 2019
Network.

Proposed Memorandum of Easements

Nature	Servient Tenement (Burdened Land)		Dominant Tenement (Benefitted Land)
	Lot No	Shown	
Right of way, rights to drain water & sewage & rights to convey gas, water, electricity & telecommunications.	5	A	Lot 6
	6	B	Lot 5
	12	C	Lots 13 & 14
	13	D	Lots 12 & 14
	14	E	Lots 12 & 13
	18	F	Lot 19
Right of way, rights to drain water & sewage & rights to convey water, electricity & telecommunications.	19	G	Lot 18
	30	AI, AJ, AK	Lot 40
	40	AG, AH	Lot 30

Proposed Schedule of Easements

Nature	Servient Tenement (Burdened Land)		Dominant Tenement (Benefitted Land)
	Lot No	Shown	
Rights to convey electricity & telecommunications.	30	AI, AJ, AK	Section 16 SO 480694 (RT 725470)
	40	AG, AH, AL, AM, AN	
Rights to drain sewage.	30	AJ	Section 16 SO 480694 (RT 725470)
	40	AH, AM	

Memorandum of Easements in Gross

Nature	Servient Tenement (Burdened Land)		Grantee
	Lot No	Shown	
Right to drain water in gross.	12	C, L	Christchurch City Council
	13	D, H, K	
	14	E	
	26	I	
	11	M	
	10	N	
	9	O	
	8	P	
	7	Q	
	6	R	
	19	S	
	20	T	
Rights to drain sewage in gross.	30	AJ	Christchurch City Council
	40	AH, AM	
Rights to convey electricity in gross.	30	AR, AK, AJ, AI	Orion New Zealand Limited
	40	AL, AM, AH, AG	

Schedule of Easements in Gross

Nature	Servient Tenement (Burdened Land)		Grantee
	Lot No	Shown	
Right to drain water in gross.	Lot 3	J	Christchurch City Council
	DP 67573 (RT CB 39C/435)		

Schedule of Existing Easements

Nature	Servient Tenement (Burdened Land)		Document
	Lot No	Shown	
Rights to convey electricity in gross.	26	I	TA.152620.7
	26	I	TA.167326.2

Total Area: 6.9560ha

Comprised in: RT's. CB47C/986,
CB47C/987 & CB47C/988116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

Whincops Road

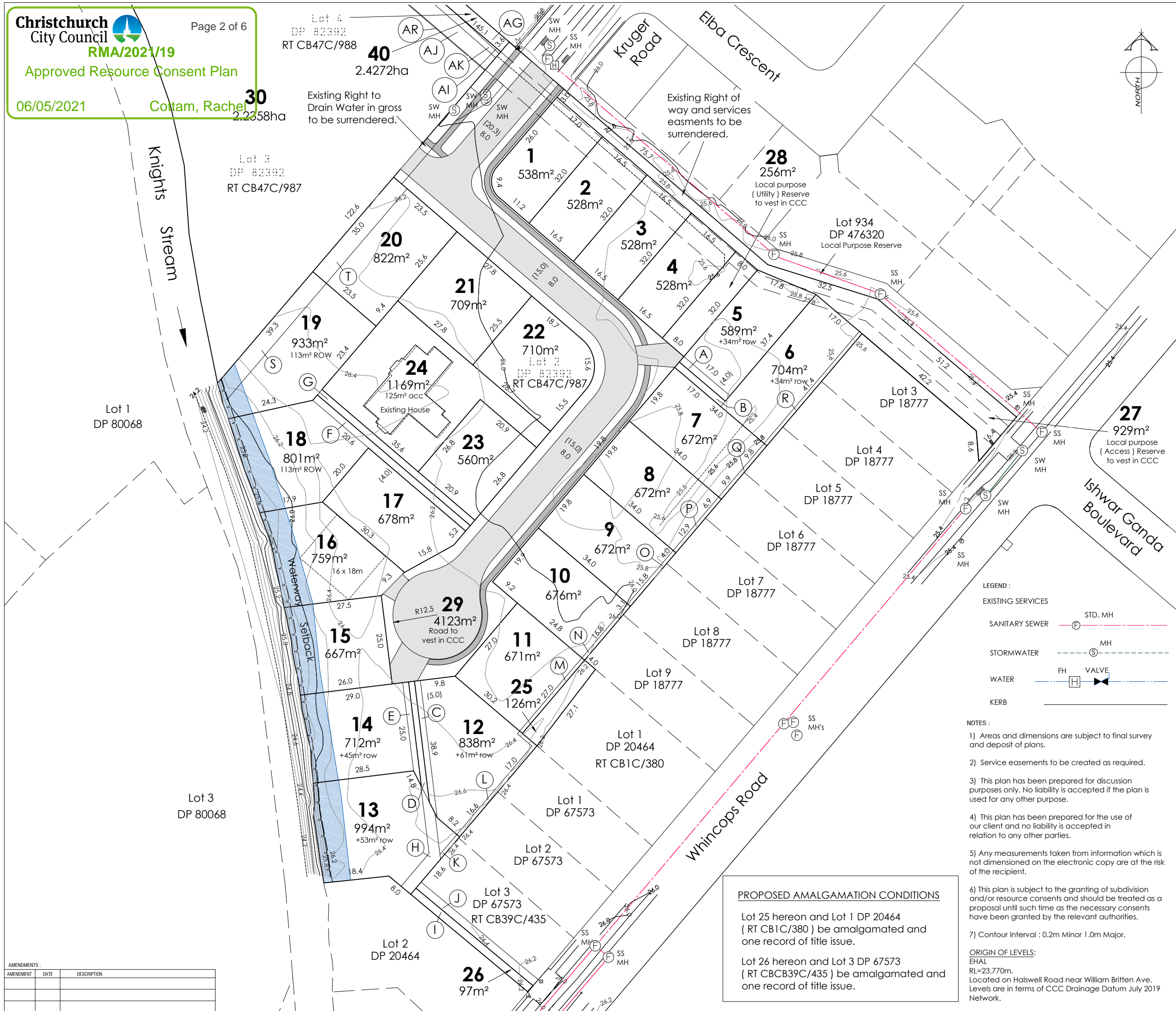
SHEET TITLE:


Proposed Subdivision of
Lots 2-4 DP 82392

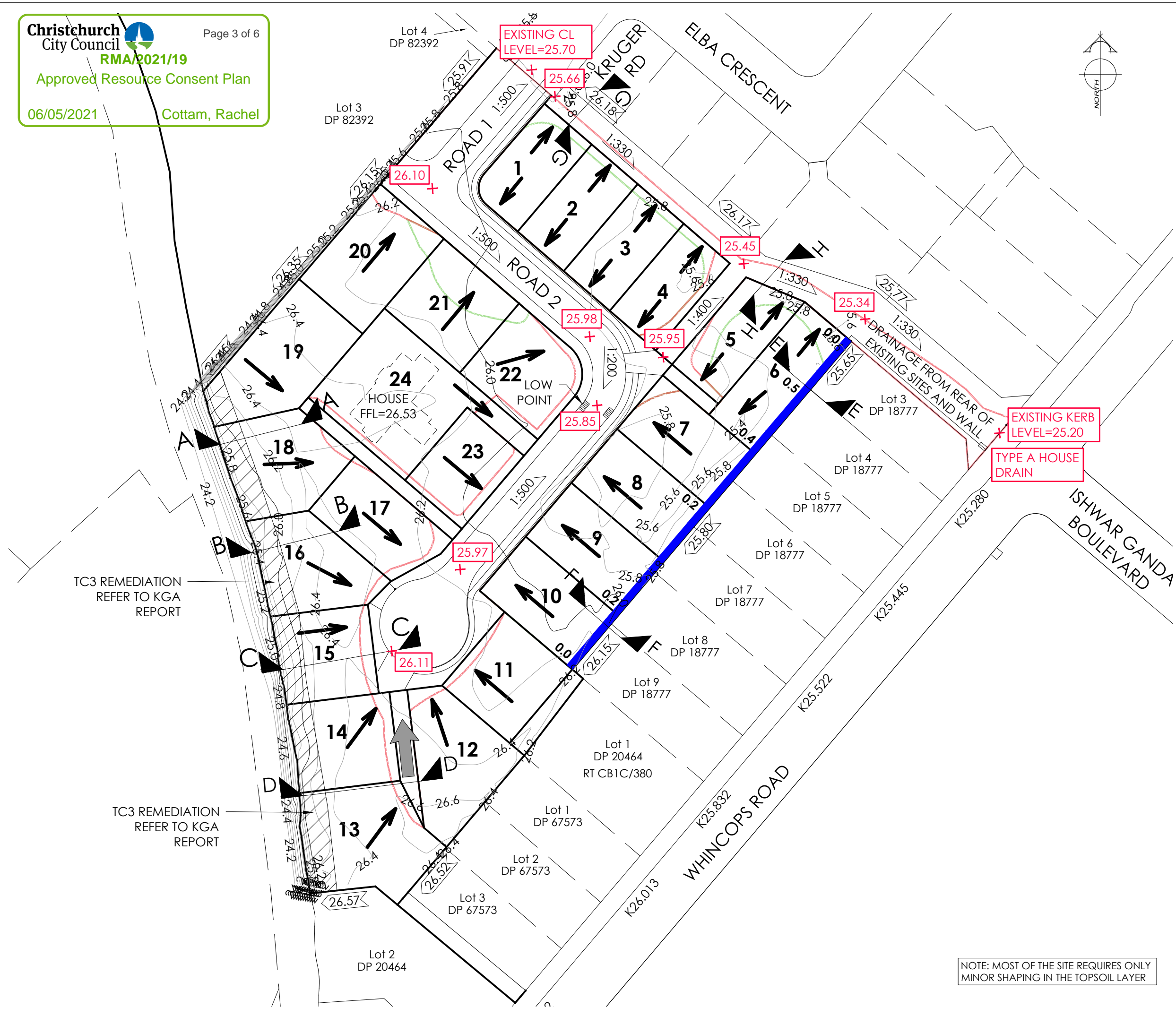
DRAWING STATUS

For Consent Purposes

SCALE: 1:1000@A1
1:2000@A3
DATE: December 2020CAD FILE: J:\2019\SUBCON\E20195 Subcon R0.dwg
DRAWN: GCDRAWING No: E20195
SHEET No: 1 of 2
REVISION:

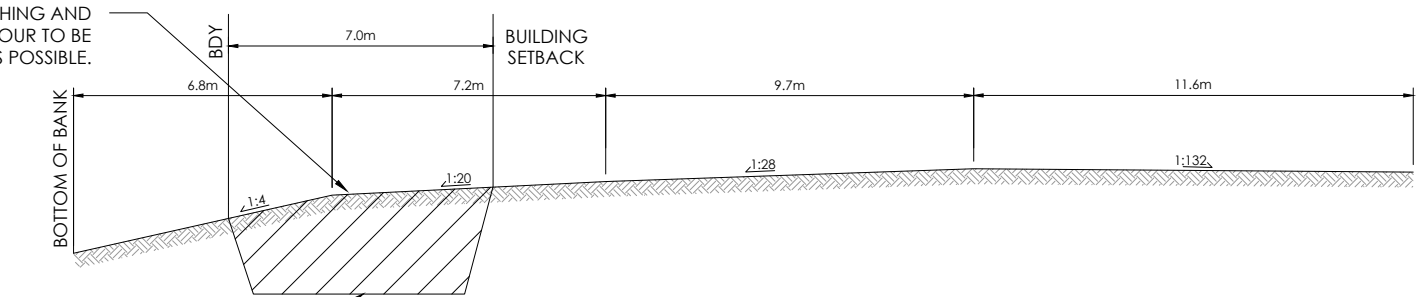


Proposed Memorandum of Easements			
Nature	Servient Tenement (Burdened Land)		Dominant Tenement (Benefitted Land)
	Lot No	Shown	
Right of way, rights to drain water & sewage & rights to convey gas, water, electricity & telecommunications.	5 6 12 13 14 18 19	A B C D E F G	Lot 6 Lot 5 Lots 13 & 14 Lots 12 & 13 Lot 19 Lot 18
Right of way, rights to drain water & sewage & rights to convey water, electricity & telecommunications.	30 40	AI, AJ, AK AG, AH	Lot 40 Lot 30
Proposed Schedule of Easements			
Nature	Servient Tenement (Burdened Land)		Dominant Tenement (Benefitted Land)
	Lot No	Shown	
Rights to convey electricity & telecommunications.	30 40	AI, AJ, AK AG,AH,AL AM,AN	Section 16 SO 480694 (RT 725470)
Rights to drain sewage.	30 40	AJ AH, AM	Section 16 SO 480694 (RT 725470)
Memorandum of Easements in Gross			
Nature	Servient Tenement (Burdened Land)		Grantee
	Lot No	Shown	
Right to drain water in gross.	12 13 14 26 11 10 9 8 7 6 19 20	C, L D, H, K E I M N O P Q R S T	Christchurch City Council
Rights to drain sewage in gross.	30 40	AJ AH, AM	Christchurch City Council
Rights to convey electricity in gross.	30 40	AR, AK, AJ, AI AL, AM, AH, AG	Orion New Zealand Limited
Schedule of Easements in Gross			
Nature	Servient Tenement (Burdened Land)		Grantee
	Lot No	Shown	
Right to drain water in gross.	Lot 3 DP 67573 (RT CB 39C/435)	J	Christchurch City Council
Schedule of Existing Easements			
Nature	Servient Tenement (Burdened Land)		Document
	Lot No	Shown	
Rights to convey electricity in gross.	26	I	TA.152620.7
Rights of way.	26	I	TA.167326.2
Total Area: 6.9560ha			
Comprised in: RT's. CB47C/986, CB47C/987 & CB47C/988			
 DAVIE LOVELL-SMITH PLANNING SURVEYING ENGINEERING			
116 Wrights Road P O Box 679 Christchurch 8140. New Zealand Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz			
JOB TITLE : Whincops Road			
SHEET TITLE : Proposed Subdivision of Lots 2-4 DP 82392			
DRAWING STATUS For Consent Purposes			
SCALE : 1:500@A1 1:1000@A3		DATE : December 2020	
CAD FILE : J:\20195\SUBCON\E20195 Subcon R0.dwg		DRAWN : GC	
DRAWING No : E20195		SHEET No : 2 of 2	
REVISION :			



AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION
R1	22/12/20	NO CHANGE THIS SHEET
NOTES:		
1) ALL WORKS IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7 CURRENT ISSUE.		
2) ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION		
3) ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.		
4) TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.		
5) EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL SERVICES TO BE FULLY SEARCHED AND PILOTED PRIOR TO TRENCHING.		
6) CONTROL OF STORMWATER, SEDIMENT AND DUST ON SITE IS THE RESPONSIBILITY OF THE CONTRACTOR		
7) ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.		
8) DESIGN CONTOUR INTERVAL: MAJOR _1.0m_ MINOR _0.2m_.		
LEGEND:		
	EXISTING BOUNDARY LEVELS	
	DESIGN LEVEL	
	DIRECTION OF FLOW	
	LOT FLOW PATH	
	CUT	
	FILL	
	RETAINING WALL & SUBSOIL DRAIN	
 DAVIE LOVELL-SMITH PLANNING SURVEYING ENGINEERING		
116 Wrights Road P O Box 679 Christchurch 8140. New Zealand Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz		
JOB TITLE:		
Whincops Road		
SHEET TITLE:		
Earthworks Concept Plan		
DRAWING STATUS		
For Discussion Purposes		
SCALE: 1:1000@A3	DATE: March 2021	
CAD FILE: J:\2019\Eng\2019\Earthworks Concept R2.dwg	DRAWN: DG	
DRAWING No:	SHEET No:	REVISION:
E20195	1 of 3	R2

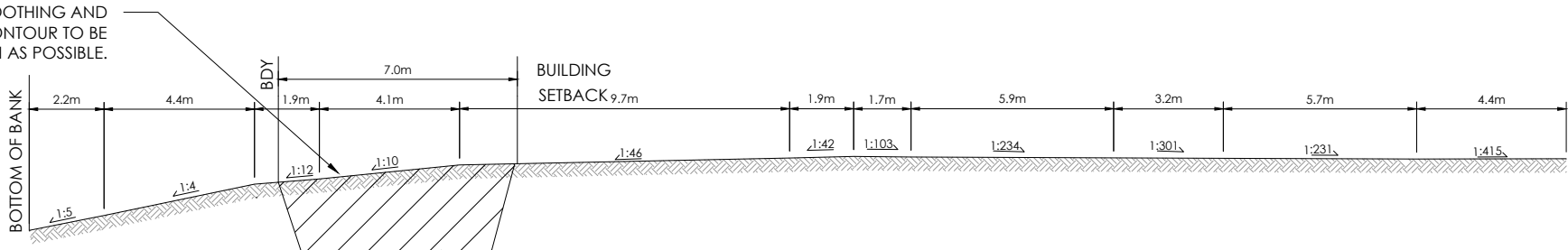
TOPSOIL HARROW, SMOOTHING AND
RE-SEEDING. EXISTING CONTOUR TO BE
MAINTAIN AS MUCH AS POSSIBLE.



CROSS SECTION A - A

Scale 1:100 Horiz @A1
1:100 Vert
1:200 Horiz @A3
1:200 Vert

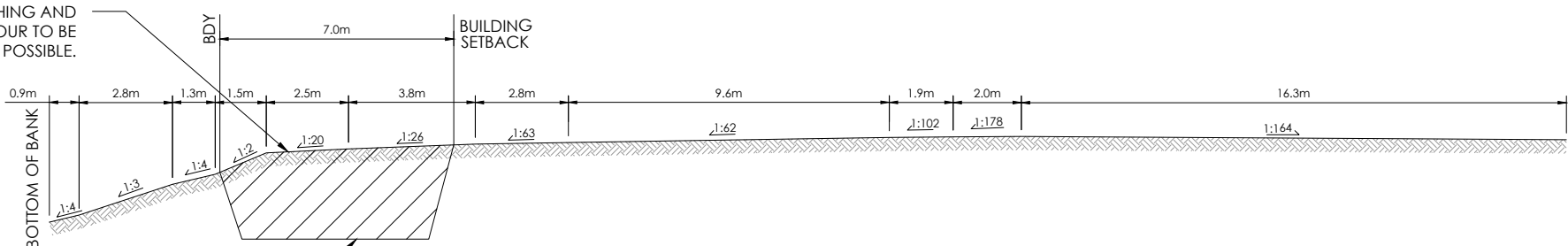
TOPSOIL HARROW, SMOOTHING AND
RE-SEEDING. EXISTING CONTOUR TO BE
MAINTAIN AS MUCH AS POSSIBLE.



CROSS SECTION B - B

Scale 1:100 Horiz @A1
1:100 Vert
1:200 Horiz @A3
1:200 Vert

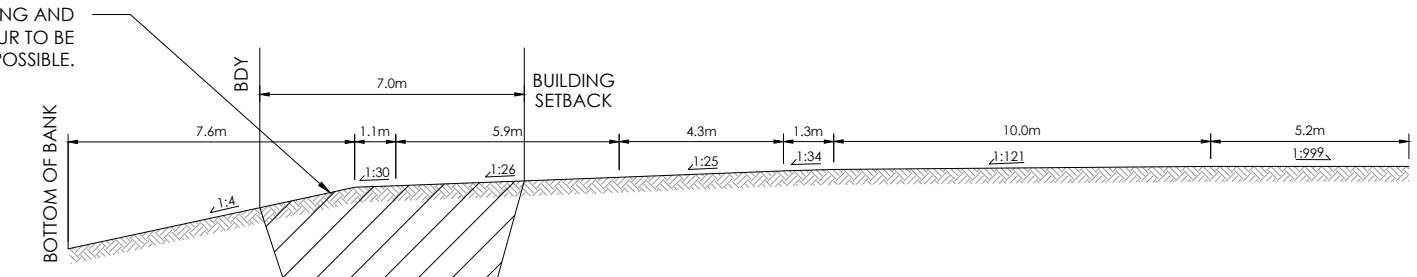
TOPSOIL HARROW, SMOOTHING AND
RE-SEEDING. EXISTING CONTOUR TO BE
MAINTAIN AS MUCH AS POSSIBLE.



CROSS SECTION C - C

Scale 1:100 Horiz @A1
1:100 Vert
1:200 Horiz @A3
1:200 Vert

TOPSOIL HARROW, SMOOTHING AND
RE-SEEDING. EXISTING CONTOUR TO BE
MAINTAIN AS MUCH AS POSSIBLE.



CROSS SECTION D - D

Scale 1:100 Horiz @A1
1:100 Vert
1:200 Horiz @A3
1:200 Vert

AMENDMENTS :		
AMENDMENT	DATE	DESCRIPTION
R1	22/12/20	VERTICAL SCALE CHANGED

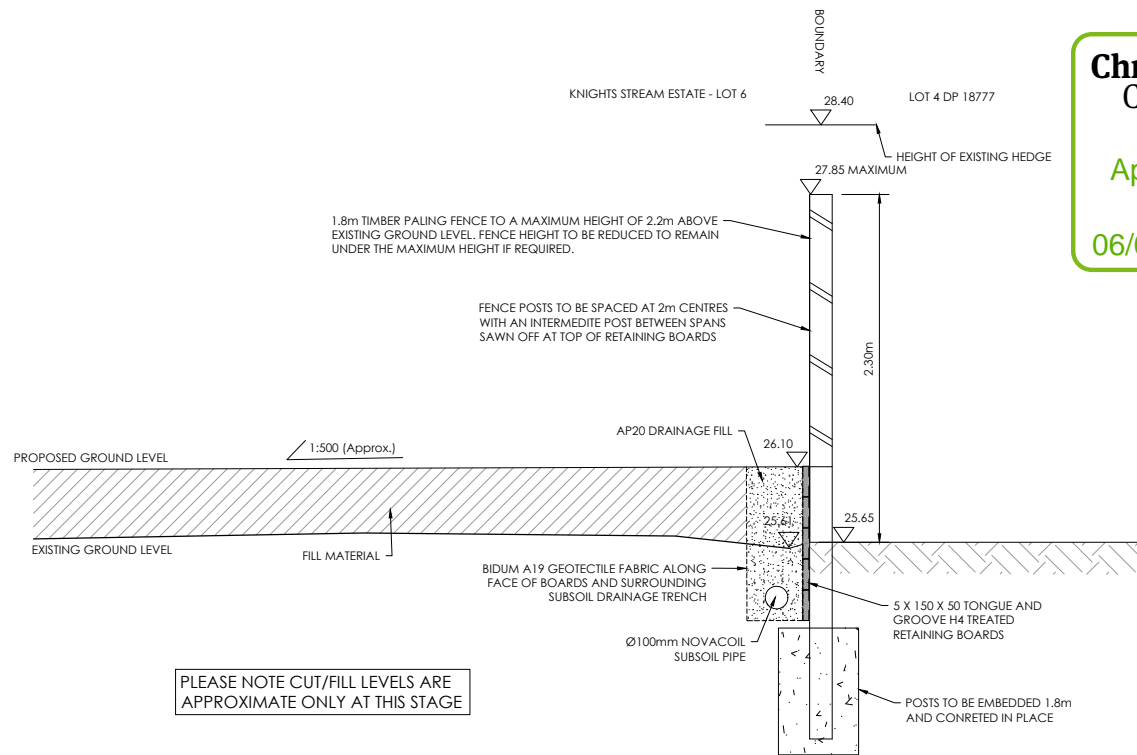
- NOTES :
- 1) ALL WORKS IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7 CURRENT ISSUE.
 - 2) ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION
 - 3) ELECTRICITY & TELECOM SERVICES NOT SHOWN, REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.
 - 4) TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - 5) EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED, ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.
 - 6) CONTROL OF STORMWATER, SEDIMENT AND DUST ON SITE IS THE RESPONSIBILITY OF THE CONTRACTOR
 - 7) ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.
 - 8) DESIGN CONTOUR INTERVAL: MAJOR _1.0m_ MINOR _0.2m_.



DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

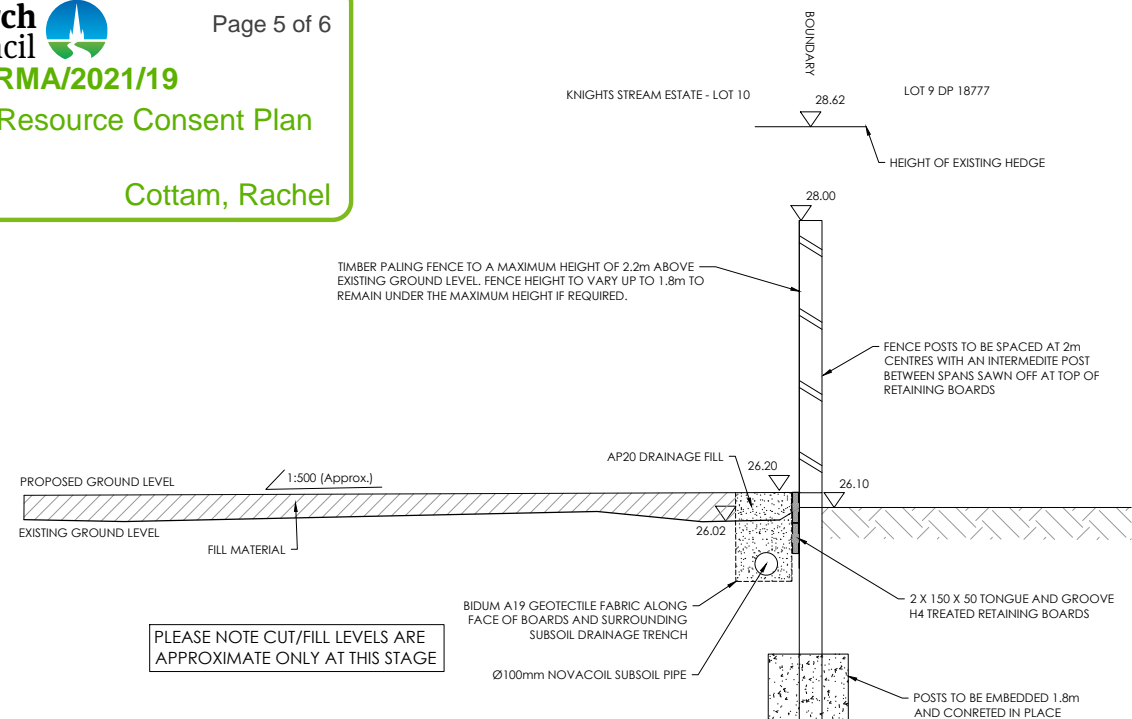
116 Wrights Road P O Box 679 Christchurch 8140 New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE: Whincops Road		
SHEET TITLE: Knights Stream Cross Sections		
DRAWING STATUS For Discussion Purposes		
SCALE : As Shown		DATE : March 2021
CAD FILE : J:\20195\Eng\20195 Earthworks Concept R2.dwg	DRAWN : DG	
DRAWING No : E20195	SHEET No: 2 of 3	REVISION : R2



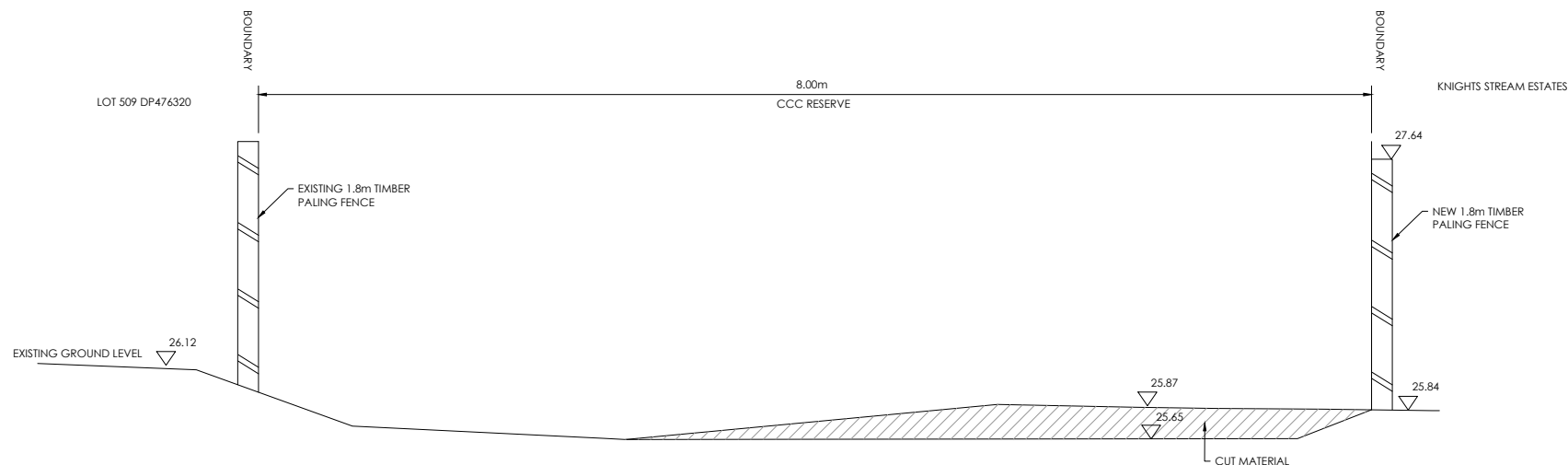
CROSS SECTION E - E

SCALES 1:25@A1
1:50@A3



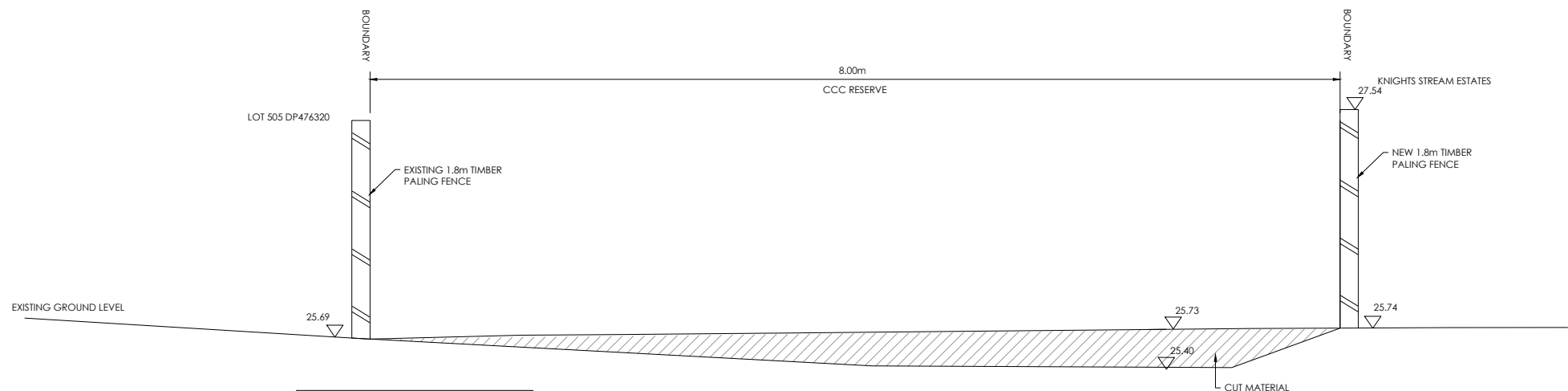
CROSS SECTION F - F

SCALES 1:25@A1
1:50@A3



CROSS SECTION G - G

SCALES 1:25@A1
1:50@A3



CROSS SECTION H - H

SCALES 1:25@A1
1:50@A3

CONCEPT ONLY

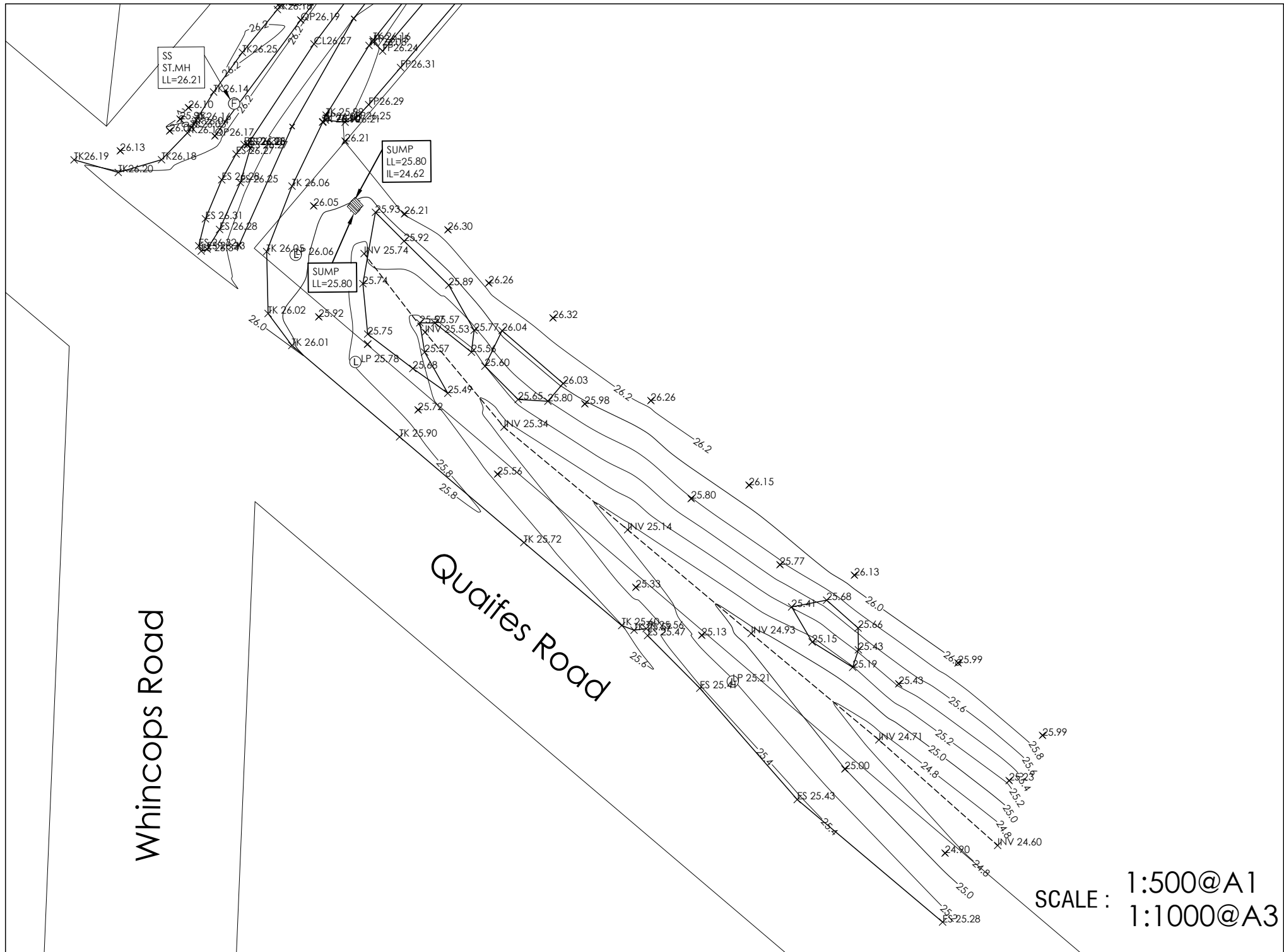
AMENDMENTS :		
AMENDMENT	DATE	DESCRIPTION
R1	22/12/20	VERTICAL SCALE CHANGED

- NOTES :
- 1) ALL WORKS IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7 CURRENT ISSUE.
 - 2) ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION
 - 3) ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.
 - 4) TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - 5) EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS. COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.
 - 6) CONTROL OF STORMWATER, SEDIMENT AND DUST ON SITE IS THE RESPONSIBILITY OF THE CONTRACTOR
 - 7) ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.
 - 8) DESIGN CONTOUR INTERVAL: MAJOR _1.0m_ MINOR _0.2m_.



116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:		
Whincops Road		
SHEET TITLE:		
Eastern Boundary Cross Sections		
DRAWING STATUS		
For Discussion Purposes		
SCALE : As Shown		DATE : March 2021
CAD FILE : z:\2019\Eng\2019\Earthworks Concept R2.dwg	DRAWN : DG	REVISION :
DRAWING No : E20195	SHEET No: 3 of 3	R2



1:500@A1
1:1000@A3

J:\20195\E20195topo.dwg

SCALE: 1:500@A1
1:1000@A3

Felicity Powell

From: Craig Burrowes <Craig@wdsl.co.nz>
Sent: Friday, June 11, 2021 12:09 PM
To: Chris Jones; Nathan Collett
Cc: Felicity Powell; Simon Abbot
Subject: FW: Knight Stream Estates

Thanks – as below.

Kind Regards

Craig



Craig Burrowes [B.Com](#) CA *Consultant*

Level Two, Building One, 181 High Street, Christchurch
PO Box 25007, City East, Christchurch 8141

p +64 3 379 1620
f +64 21 356 977



[Click here](#) for office directions

NOTICE TO CLIENTS:

Commencing 1 October 2018, all accountants are required to comply with the Anti-Money Laundering and Countering Financing of Terrorism Act 2009 (AML/CFT). Under this legislation we may need to gather more information from you before providing certain services. This may include asking for photo identification and proof of address.

From: Chelsea Bates <Chelsea@rhodes.co.nz> **On Behalf Of** Sarah O'Gorman
Sent: 11 June 2021 11:36 a.m.
To: Craig Burrowes <Craig@wdsl.co.nz>
Subject: Knight Stream Estates

Craig,

Further to our telephone conversation on Wednesday, I have now considered the Subdivision Consent in relation to the fencing on the waterway setback boundary. It will be recorded via Consent Notice on the titles for lots 13-16, 18 and 19 that any future fencing in areas A to F shall be limited to open style fencing (no more than 20% solid structure) and setback 3m from the bank of the waterway.

As per your instructions, we will leave it to you and the agent to work with the purchasers of the above lots directly to ensure appropriate fencing (if any) is installed by the purchasers in the future.

I also note that two pieces of land (lots 25 & 26) are to be transferred and amalgamated with neighbouring lot 1 DP 20464 and lot 3 DP 67573. In due course, we will need to contact the owners of those properties or their solicitors to progress.

Regards,



RMA/2021/19

Approved Resource Consent
Document

06/05/2021

Cottam, Rachel

Soil Contamination Risk Preliminary Site Investigation Report

***60A Whincops Road,
Halswell, Christchurch***

September 2020



Malloch Environmental Ltd

19 Robertsons Rd, Kirwee

RD1, Christchurch 7671

021 132 0321

www.mallochenviro.co.nz

QUALITY CONTROL AND CERTIFICATION SHEET

Client: Craig Burrowes

Date of issue: 1 September 2020

Report written by:

Fran Hobkirk, Environmental Scientist, BSc
(3 years contaminated land experience)

Signed: 

Report reviewed and certified as a Suitably Qualified and Experienced Practitioner by:

Nicola Peacock, Principal Environmental Engineer, NZCE, CEnvP
(11 years contaminated land experience within 27 years environmental experience)

Signed: 



CONTENTS

1	Executive Summary.....	4
2	Objectives of the Investigation	4
3	Scope of Work Undertaken.....	4
4	Site Identification	6
5	Site Description and Surrounding Environment	7
6	Geology and Hydrology.....	7
7	Site History.....	7
7.1	Previous Site Ownership and Use	7
7.2	District Council Records	7
7.3	Regional Council Records.....	8
7.4	LINZ Records.....	8
7.5	Review of Historic Aerial Photographs	8
8	Site Inspection.....	9
9	HAIL Uses and Possible Types of Contaminants Associated with Past Use	12
10	Basis for Soil Guideline Values (SGV)	13
10.1	Activity Description	13
10.2	Zoning.....	13
10.3	Soil Guideline Values.....	13
11	Site Characterisation and Conclusion	14
12	Planning Status.....	15
13	Limitations.....	15

APPENDICES

A	Historic Certificates of Title
B	Historic Aerial Photographs
C	LLUR Statement

1 Executive Summary

The subject site is a single rural residential lot with street address 60A Whincops Road, Halswell, Christchurch. It is proposed to subdivide and develop the lot for residential development. This proposal would change the use of the land and result in disturbance of soils. The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCSC) require an assessment of the likelihood of soil contamination being present. It is noted also that Malloch Environmental Ltd is obligated to consider the requirements of Section 10 (4) of the Health and Safety at Work (Asbestos) Regulations 2016. This report details the work undertaken to assess the risks.

The subject site has had a general pastoral use prior to development for residential rural use in 2005. A dwelling and three farm sheds are currently present on the subject site. The sheds and yard area are used to repair farm machinery. The investigations undertaken have indicated a risk area within and to the rear of the yard on the subject site. There is a risk of contamination from heavy metals, PAHs and TPH from current and historical activities including:

- Storage and possible historical dismantling of vehicles
- Storage of tyres
- Storage of treated timber
- Waste oil drums
- A burn drum

The location of the risk area is shown on the Risk Area Plan in Section 11 of this report. These are confirmed or likely Hazardous Activities and Industries List (HAIL) activities and there may be a risk to human health from potentially contaminated soils in this area. It is recommended that a Detailed Site Investigation, in terms of the Ministry for the Environment's Contaminated Land Management Guidelines, be undertaken on the identified risk area prior to any change of use or development.

The rest of the subject site has been used for general pasture until being developed for rural residential use in 2005 and these uses are highly unlikely to have caused a risk to human health or the environment. There is no evidence of HAIL activities or industries having occurred on this area of the subject site, now or in the past. The rest of the subject site is considered suitable for residential use with no further investigations required.

In terms of planning status at the time of writing of this report, the NESCSC does apply and a resource consent under the NESCSC is required for the proposed subdivision.

2 Objectives of the Investigation

This report has been prepared in accordance with the Ministry for the Environment's "Contaminated Land Management Guidelines No 1: Reporting on Contaminated Sites in New Zealand". This report includes all requirements for a Stage 1 Preliminary Site Investigation report. This is one of the methods described in Section 6(3) of the NESCSC to establish whether the regulations apply.

The objective is to determine whether there is any risk of potential contamination that would warrant further investigation.

3 Scope of Work Undertaken

The scope of the work undertaken has included:

- Review of Christchurch City Council property files

- Obtaining ECan data from the Listed Land Use Register (LLUR)
- Search of LINZ NZ orchard database
- Review of historic aerial photos
- Review of historic titles
- Site Inspection
- Preparation of report in accordance with MfE guidelines

4 Site Identification

The subject site has street address 60A Whincops Road, Halswell, Christchurch as shown on the plan in **Figure 1** below. The subject site is legally described as Lot 2 DP 82392 and has a total area of approximately 2.1695Ha.

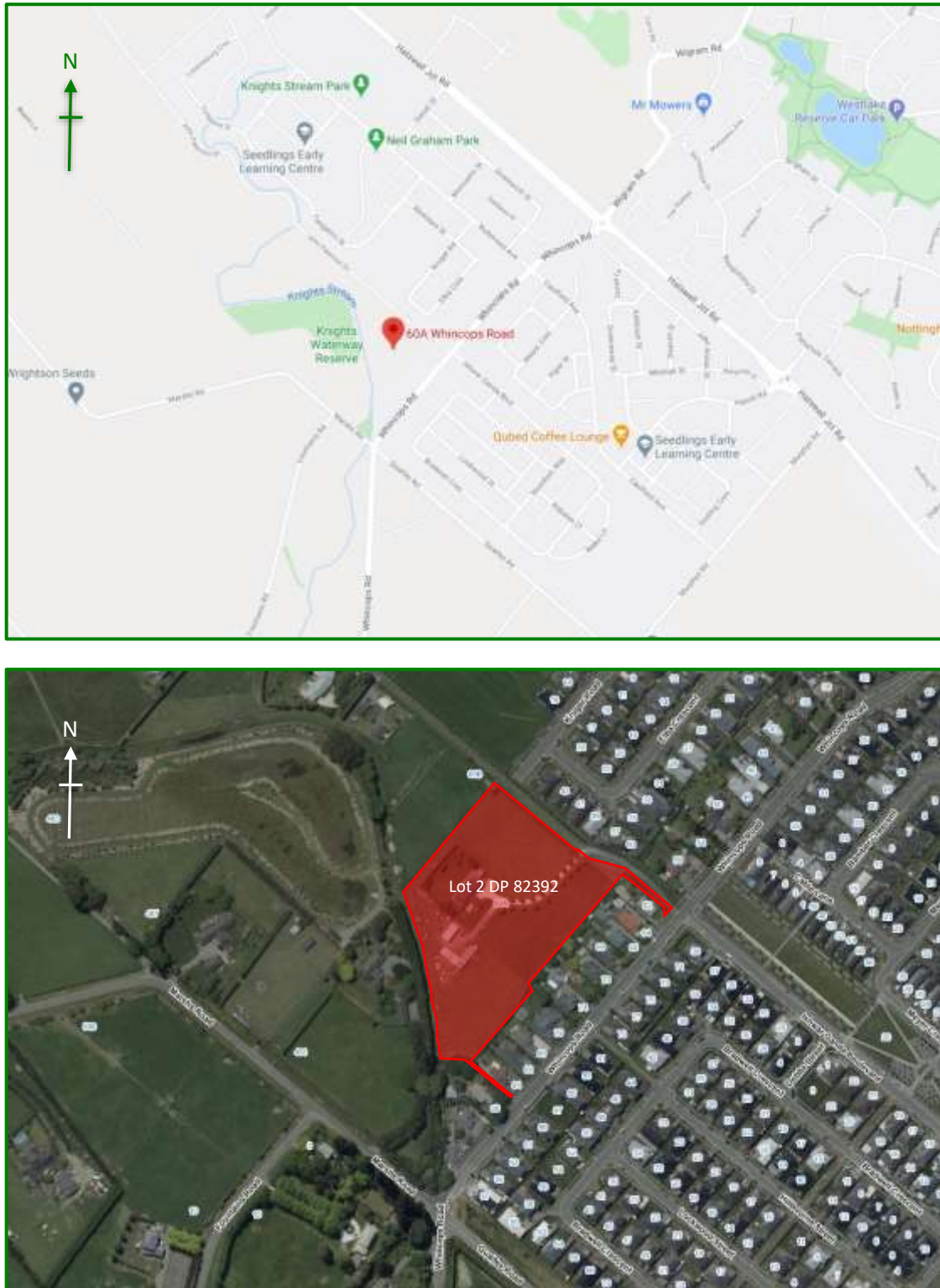


Figure 1 – Location Plan

5 Site Description and Surrounding Environment

The subject site is flat rural residential land in Halswell, Christchurch. There is a dwelling and three farm sheds on the subject site. The subject site is clearly defined by existing hedges and fences. It is bounded to the east by residential land. It is bounded to the west by rural residential land and Knights Waterway Reserve.

6 Geology and Hydrology

The ECan GIS describes the soils as Kaiapoi deep silty loam. Soil trace elements are 'Regional, Recent'. Wells in the area indicate that topsoils are underlain by sandy gravels.

The site lies over the coastal confined gravel aquifer system. Ground water levels recorded on nearby bore logs are between 2.80m and 5.49m deep. The direction of ground water flow is generally in a south-easterly direction. ECan's GIS shows two active wells on the subject site. The nearest downgradient well is a domestic supply well approximately 16m south-east of the subject site.

There are no open water features on the subject site. Knights Stream, an ephemeral waterway, runs along the outside of the western boundary.

7 Site History

7.1 Previous Site Ownership and Use

Historic Certificates of Title were searched and the following relevant ownership information was obtained:

Jun 1927 - Hannah Katherine McTeigue, married woman
 Nov 1931 - Roydon Pressey Granger, law clerk
 Dec 1931 - Hubert Joseph McTeigue, Ernest James McTeigue and Charles Mathew McTeigue, all farmers
 Apr 1967 - Mathew Norman Charles William McTeigue, farmer
 Oct 1974 - Norman Edmund McTeigue, contractor, Una Daphne Rhodes, married woman and Ian Duncan Bennetts, solicitor as executors
 Mar 1975 - Norman Edmund McTeigue, contractor and Una Daphne Rhodes, married woman
 Sep 1981 - Clement Craig Scott, farmer
 Nov 1989 - Kradall Farm Ltd
 Sep 1990 - Andrew Angus McFarlane, company director
 Jun 2003 - Gregory Howard Clarke and Dorothy Jean Clarke
 Sep 2003 - Anthony Mark Dolan, Jennifer Raewyn Harwood and Matthew Raymond Shepherd
 Mar 2015 - Anthony Mark Dolan and Jennifer Raewyn Harwood

Note that some of the older information was of poor quality and difficult to follow, therefore the accuracy of the spelling of names and dates is not guaranteed.

Copies of the Historic Titles are included in **Appendix A**.

7.2 District Council Records

The Christchurch City Council (CCC) property file was reviewed and records included building consents for the following:

2005 - Erect a shed

2005 - Erect a dwelling with attached garage
2008 - Install a swimming pool fence
2010 - Erect a farm shed

Additionally, the file includes a report from 2007 of a complaint of over 50 damaged cars being stored on site.

7.3 Regional Council Records

The ECan Listed Land Use Register Statement does not list the subject site or any nearby sites.

The statement includes summaries of two nearby Detailed Site Investigations. Neither investigation found contamination above residential soil guideline values near the subject site.

See LLUR Statement in **Appendix C**.

Resource consent information was sourced from the GIS mapping system. There are no active resource consents for the subject site. There are active consents for adjacent land to discharge domestic wastewater to land.

7.4 LINZ Records

The LINZ Orchard layer does not show the subject site or adjacent lots as having listed orchards.

7.5 Review of Historic Aerial Photographs

A total of nine aerial photos (see copies in **Appendix B**) have been used to assess the historic use of the site as detailed below:

- The earliest photo is from **1941** and has been sourced from ECan's GIS. The subject site is part of a larger farming block pasture. There are no buildings or structures on the subject site. The surrounding area is similar pasture farmland. There are dwellings and a farm shed beyond the subject site to the south-east. Knights Stream is marked by a line of trees running along the western boundary of the site.
- A photo from **1955** is also sourced from ECan's GIS and shows structures on the southern corner of the subject site. It is not clear what these structures are but the narrow, rounded shape suggests these are not buildings. Potentially it may be an area of young forest with access tracks rather than two structures causing a shadow. A new farm shed has been built beyond the subject site to the south-east. A new dwelling has been built approximately 50m north-east of the subject site.
- A photo from **1965** is sourced from ECan's GIS and shows a shed has been built on the southern corner of the subject site. Residential lots have been developed adjacent to the south-east boundary of the subject site, along Whincops Road.
- A photo from **1974** is sourced from ECan's GIS and shows no significant changes to the subject site or surrounding area.
- A photo from **1984** is sourced from ECan's GIS and shows animal pens have been added adjacent to the shed on the southern corner of the subject site. Part of a horse training track crosses the subject site. Possible horticultural activities are occurring approximately 42m west of the subject site. A dwelling has been built next to this possible market garden area.

- A photo from **1995** is sourced from ECan's GIS and shows the horse training track has been removed. The possible market garden area beyond the subject site to the west has also been removed.
- A photo from **2004** is sourced from ECan's GIS and shows the shed has been removed from the subject site. More dwellings have been built beyond the subject site along Whincops Road. New dwellings have also been built beyond the subject site to the west and to the north-west.
- A photo from **2011** is sourced from ECan's GIS and shows a dwelling and two farm sheds have been built on the subject site. Another structure, south-west of the sheds, may be a third shed or a long vehicle such as a bus. Vehicles and other items are being stored on a hardstanding area in front of the sheds and on grass around the sheds. There are no significant changes to the surrounding area.
- The most recent aerial photo reviewed, dated **2018**, is sourced from ECan's GIS. The third shed/bus has been removed from the subject site. A new shed has been built on the north-west side of the yard area. Machinery, car parts and other items are being stored around the sheds and along the western boundary of the subject site. Substantial residential development has occurred to the east of the subject site.

8 Site Inspection

A site inspection was undertaken on the 26th August 2020 to assist with characterising the site. Prior to the inspection the previous owner, Tony Dolan, advised that the yard area was used for repairing farm machinery. He advised that there are no fuel tanks on the site and any vehicles or machinery brought onto the site for repair were drained first.

No evidence of potential sources of contamination were noted in the paddocks or dwelling curtilage area of the subject site during the site inspection.

Around the yard area are three farm sheds constructed from galvanised iron and timber. Shed 1, on the south-east side of the yard was locked but it appears the floor is concrete. At the end of this shed are two animal pens. Some scrap metal items were being stored in front of this shed. Shed 2, on the south-west side of the yard is open fronted and has a concrete floor, it is being used to store vehicles. At the end of this shed is a wood store. Shed 3, on the north-west side of the yard is open fronted with a shingle floor. It is being used to store tractors. Containers of lubricant, hydraulic fluid and fuel were noted on the floor as well as car batteries. Some oily patches were seen on the shingle.



Photo 1: Yard with three sheds

In between the farm sheds is an area of hardpacked gravel. The gravel was mainly clean but a few small areas with a dark, oily appearance were seen.

One the north-east side of the yard is a fence. Oil drums and metal items are being stored along this fence. Some of the gravel in this area had a stained appearance. An empty drum has been used to burn waste. Ash and burnt items were seen on the ground around this drum.



Photo 2: Oil drums, metal items and a drum used to burn waste



Photo 3: More metal items and machinery beside fence

Tyres, a car, vehicle parts, farm machinery and truck beds are being stored on the grassed area between the yard, dwelling curtilage area and the Knights Stream boundary. Some treated timber is being stored behind shed 3. There was also a pile of waste straw and tree trimmings but no ash or blackened ground to suggest this pile was a burn pile.



Photo 4: Stored tyres



Photo 5: Car, car parts and tyres



Photo 6: Stored machinery parts and truck beds

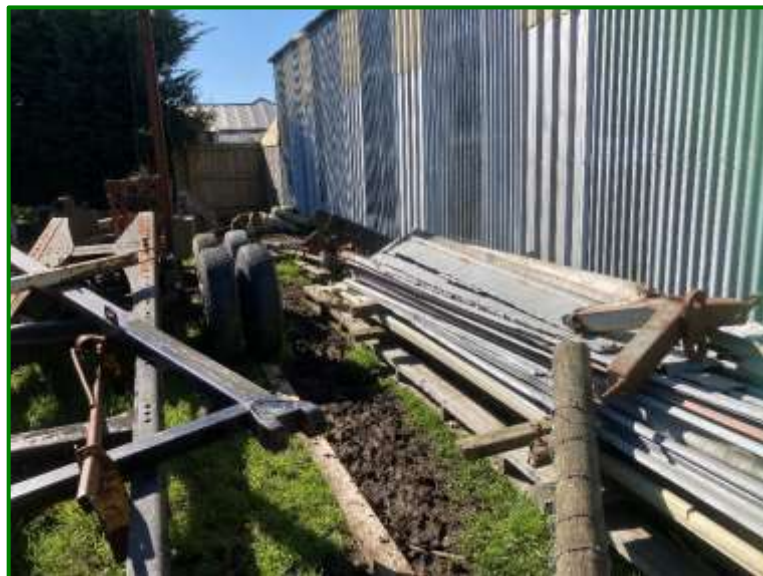


Photo 6: Treated timber and metal stored behind shed 3

9 HAIL Uses and Possible Types of Contaminants Associated with Past Use

The Hazardous Activities and Industries List (HAIL) compiled by The Ministry for the Environment include the following categories (*in italics*) that could be associated with the historical uses of the site with a summary of the risk of these activities having been carried out on the site.

A - Chemical manufacture, application and bulk storage

10. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds

The subject site has been used for pastoral activities prior to 2005 when it was developed for rural residential use. The normal uses of fertilisers and pastoral weed controls associated with pastoral use are unlikely to have caused soil contamination that would pose a risk to human

health. It is considered unlikely that persistent agrichemicals were used or stored on the site in any significant volume now or in the past.

17. Storage tanks or drums for fuel, chemicals or liquid waste

There is no evidence to indicate underground or above ground fuel tanks are present on the site. However, drums of waste oil are being stored beside a fence and the soils around this drums have a stained, oily appearance. Contaminants of concern include petroleum hydrocarbons (TPH).

18. Wood treatment or preservation including the commercial use of antisapstain chemicals during milling, or bulk storage of treated timber outside

Treated timber is being stored on site which can pose a risk of contamination on the site, however, the quantity is small. Contaminants of concern include arsenic.

G – Cemeteries and waste recycling, treatment and disposal

4. Scrap yards including automotive dismantling, wrecking or scrap metal yards

Machinery and vehicle parts were noted during the site inspection and the council property file indicates more vehicles were stored on site in 2007. Contaminants of concern include heavy metals, polycyclic aromatic hydrocarbons (PAHs) and TPH.

5. Waste disposal to land

A burn drum was noted during the site inspection with ash and burnt debris on the adjacent ground. There are also two areas on the site where old tyres are being stored. Contaminants of concern include heavy metals and PAHs.

10 Basis for Soil Guideline Values (SGV)

10.1 Activity Description

This report has been written for the following potential activities:

- Subdivision and development of the site for residential use,
- Soil disturbance activities associated with the above use and development of the site

10.2 Zoning

The majority of the subject site is currently zoned Residential Suburban Zone.

10.3 Soil Guideline Values

Human health soil contaminant standards for a group of 12 priority contaminants were derived under a set of five land-use scenarios and are legally binding under The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Health) Regulations 2011 (NESCS). These standards have been applied where applicable. The regulations describe these as Soil Contaminant Standards. For contaminants other than the 12 priority contaminants, the hierarchy as set out in the Ministry for the Environment Contaminated Land Management Guidelines No 2 has been followed. These are generally described as Soil Guideline Values. For simplicity, this report uses the terminology Soil Guideline

Values (SGV) when referring to the appropriate soil contaminant standard or other derived value from the hierarchy. For soil, guideline values are predominantly risk based, in that they are typically derived using designated exposure scenarios that relate to different land uses. For each exposure scenario, selected pathways of exposure are used to derive guideline values. These pathways typically include soil ingestion, inhalation and dermal adsorption. The guideline values for the appropriate land use scenario relate to the most critical pathway.

The land-use scenarios applicable for this site would be 'residential 10% produce' and 'commercial/industrial/outdoor maintenance workers' as a proxy for construction workers disturbing soils.

11 Site Characterisation and Conclusion

The investigations undertaken have indicated a risk area within and to the rear of the yard on the subject site. There is a risk of contamination by heavy metals, PAHs and TPH from current and historical activities including:

- Storage and possible historical dismantling of vehicles
- Storage of tyres
- Storage of treated timber
- Waste oil drums
- A burn drum

The location of the risk area is shown on the Risk Area Plan in **Figure 2** below. These are confirmed or likely HAIL activities and there may be a risk to human health from potentially contaminated soils in this area. It is recommended that a Detailed Site Investigation, in terms of the Ministry for the Environment's Contaminated Land Management Guidelines, be undertaken on the identified risk area prior to any change of use of development.



Figure 2 – Risk Area Plan

The rest of the subject site has been used for general pasture until being developed for rural residential use in 2005 and these uses are highly unlikely to have caused a risk to human health or the environment. There is no evidence of HAIL activities or industries having occurred on this area of the subject site, now or in the past. The rest of the subject site is considered suitable for residential use with no further investigations required.

12 Planning Status

In terms of the NESCS section 5 (7) states that the land is considered to be covered if an activity or industry described in the HAIL is being undertaken on it; or has been undertaken on it; or it is more likely than not that an activity is being or has been undertaken on it. Section 6 describes the methods for determining whether the land is as described in section 7. Method 6 (3) is to rely on a Preliminary Site Investigation.

This Preliminary Site Investigation has found that there is evidence of an activity or industry described in the HAIL occurring on the subject site now or in the past. In terms of planning status at the time of writing of this report, the NESCS does apply to the site and resource consent for the subdivision is required.

13 Limitations

Malloch Environmental Limited has performed services for this project in accordance with current professional standards for environmental site assessments, and in terms of the client's financial and technical brief for the work. Any reliance on this report by other parties shall be at such party's own risk. It does not purport to completely describe all the site characteristics and properties. Where data is supplied by the client or any third party, it has been assumed that the information is correct, unless otherwise stated. Malloch Environmental Limited accepts no responsibility for errors or omissions in the information provided. Should further information become available regarding the conditions at the site, Malloch Environmental Limited reserves the right to review the report in the context of the additional information.

Opinions and judgments expressed in this report are based on an understanding and interpretation of regulatory standards at the time of writing and should not be construed as legal opinions. As regulatory standards are constantly changing, conclusions and recommendations considered to be acceptable at the time of writing, may in the future become subject to different regulatory standards which cause them to become unacceptable. This may require further assessment and/or remediation of the site to be suitable for the existing or proposed land use activities. There is no investigation that is thorough enough to preclude the presence of materials at the site that presently or in the future may be considered hazardous.

No part of this report may be reproduced, distributed, publicly displayed, or made into a derivative work without the permission of Malloch Environmental Ltd, other than the distribution in its entirety for the purposes it is intended.

Appendix A – Historic Certificates of Title

Reference:
Prior C/T. 583/28

Transfer No. 575586
N/C. Order No.



CANCELLED
REGISTER

Land and Deeds 69

No. 1C/379

Limited as to Parcels

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 19th day of April one thousand nine hundred and sixty-two under the seal of the District Land Registrar of the Land Registration District of Canterbury

WITNESSETH that MATHEW NORMAN CHARLES WILLIAM McTEIGUE of Halswell Farmer

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 25 acres 2 perches or thereabouts situated in Blocks XIII and XIV of the Christchurch Survey District being part of Rural Section 552



Transmission 14285/1 to Norman Edmund McTeigue of Christchurch, Contractor, Una Daphne Rhodes of Christchurch, Married Woman and Ian Duncan Bennetts of Christchurch, Solicitor as Executors - 30.10.1974 at 1.50 p.m.

Transfer 345693/1 to Clement Craig Scott of Makikihi, Farmer - 18.9.1981 at 9.29 a.m.

for A.L.R.

Transfer 836150/3 to Kradall Farm Limited at Christchurch - 3.11.1989 at 11.25 a.m.

Mortgage 836150/4 to Westpac Banking Corporation - 3.11.1989 at 11.25 a.m.

No. 899496/1 Change of Name of the above proprietor to Naig Holdings Limited - 27.9.1990 at 10.21am

Transfer 899496/2 to Andrew Angus McFarlane of Christchurch, Company Director - 27.9.1990 at 10.21am

Mortgage 908895/3 to Duncan Cotterill Nominees Limited - 23.11.1990 at 11.35am

Transfer 27476/1 to Norman Edmund McTeigue abovenamed and Una Daphne Rhodes of Christchurch, Married Woman - 5.3.1975 at 10.19 a.m. (as tenants in common in equal shares)

Scale: 1 inch = 10 chains

OVER..

for A.L.R.

Register copy for L. & D. 69, 71, 72

ic/379

No. 924607/1 Memorandum of Encumbrance for
the benefit of The Christchurch City
Council - 13.3.1991 at 9.52am

[Signature]
A.L.R.

PLAN No. 67573 LODGED 27/12/94
AND DEPOSITED 23/12/94

No. A152620/1 Certificate pursuant to
Section 224(c) Resource Management Act 1991
- 23.12.1994 at 11.31am

[Signature]
A.L.R.

Discharge of Mortgage 908895/3 as to Lots
1-3 DP 67573 - 23.12.1994 at 11.31am

[Signature]
A.L.R.

OCT A152620/3-6 - Cancelled and Cst
23.12.1994 39C/433-436 issued for
Lots 1-3 DP 67573
respectively and the
balance herein

[Signature]
A.L.R.

CANCELLED DUPLICATE DESTROYED



NEW



ZEALAND

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

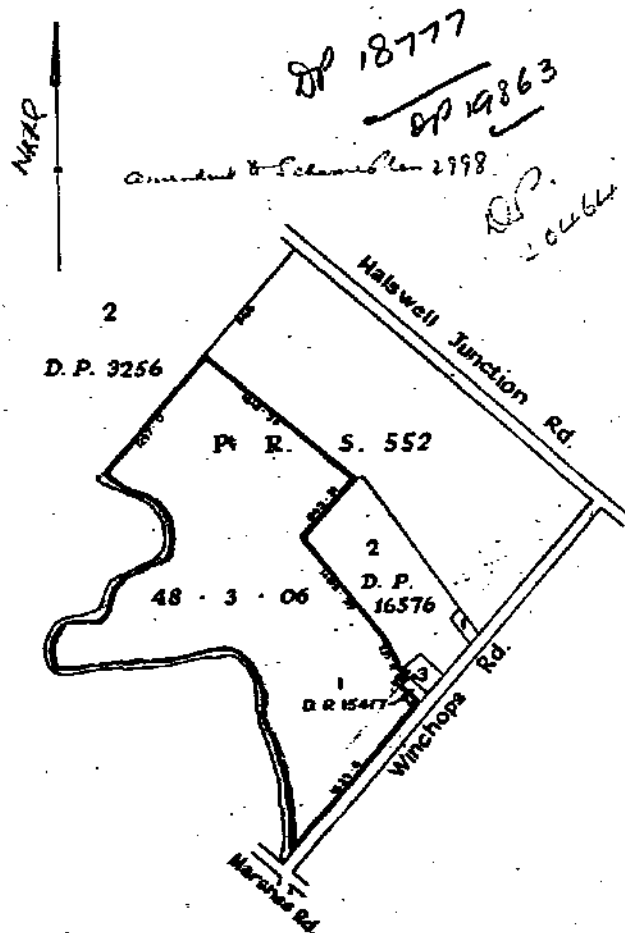
Limited as to Parcels

This Certificate, dated the Twenty-sixth day of June, one thousand nine hundred and fifty-three
under the hand and seal of the District Land Registrar of the Land Registration District of Canterbury Witnesseth that
HUBERT JOSEPH McTRIGUE ERNEST JAMES McTRIGUE and CHARLES MATHWY McTRIGUE all of Christchurch Farmers
are seised of an estate in fee simple as tenants in common in equal shares

is ~~in fee simple~~ (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written or endorsed hereon, subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered green, be the several admeasurements a little more or less, that is to say: All that parcel of land containing FORTY-EIGHT ACRES THREE RODS AND SIX PERCHES or thereabouts situated in Blocks XIII and XIV of the Christchurch Survey District being part of Rural
Section 552 —



Assistant District Land Registrar



Scale : 10 chains to an inch

431763 Notice pursuant to Section 5
of the Land Subdivision in Counties Act
1946 that lots 2 & 3 on Scheme
Plan 2998 are subject to a condition
as to Buildings *from 21st 19 January 1956 at 10.56 am*

Pursuant to Section 13 Land Subdivision in Counties Act
1946 Lot ~~4~~ 7 Plan 1877 is vested in Her Majesty
the Queen as Crown Land available for disposal.
Entered 6/10/56 *W. J. L. L.*

447933 Transfer of Lolo & 9 Plan 18727
to Registered Proprietor to Charles
Matthew McTigue of Christchurch Town
and man's wife McTigue his wife
passed 29 October 1956 at 10.52 9th 11th
697/64 *W. H. Wilson*

4448 4449 Drafts of Loh 1 and 2
Place 1877 The Register Properties
for Business. Hans Bernhart producer
6 November 1956 at 11:39 am
CT 698/15. *[Signature]* R.

Transfer 4822249 of Lot 1, 20.9.1983 the above
for transfer to Eugene Thomas Mearns
Frederick 26/6/1958 at 2.30 p.m.
799/44

Dep 781/31 received for Lot 7 Plan 18777
4-2-1919.

583/28

Transfer 500833 of part the above properties to Gilbert John Rhodes and then Rhyolite Rhodes produced 11/5/1959 at 2.37pm 285/69. *W. J. M. M.*

Transfer 507891 of Lot 3 DP 18222 the above proprietors to Bruce Glen Blair and Valerie Alison Ayres (Trading Account) produced 2/9/1959 at 10.21 am. *W. J. M. M.*

Transfer 521066 of Lot 3 DP 20464 the above proprietors to Paul Edwards (Trading Account) produced 25/3/1960 at 10.21 am 832/71. *W. J. M. M.*

Transfer 539110 of Lot 5 D.P. 18777 the above proprietors to Kenneth Francis Quishman produced 23/11/1960 at 1.54 pm. (Trading Account) 864/93. *W. J. M. M.*

Transfer 551596 of Lot 6 DP 5777 the above proprietors to John Nicholas McLean produced 23/5/1961 at 2.16 pm. (Trading Account) 885/16. *W. J. M. M.*

Transfer 556034 of Lot 4 DP 18777 the above proprietors to Frank Albert Blegg produced 1/11/1961 at 9.20 am. *W. J. M. M.*

The 575585 underact that the correct name of one of the above proprietors is Mathias Norman Charles William McLeigue - entered 19/4/1962 at 2.10 pm. *W. J. M. M.*

Cancelled as to lots 1 & 2 DP 20464 and one is issued.

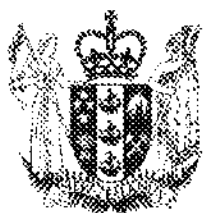
CT 10/380 for lot 1

CT 10/381

17C O. 575587 - 19/4/1962. *W. J. M. M.*

Transfer 575587 of the interest in Calcas to Robert Joseph McLeigue and Ernest James McLeigue to the above said Thomas Charles William McLeigue produced 19/4/1962 at 2.16 pm. 10/375. *W. J. M. M.*

Cancelled except cross land.



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Limited as to Parcels

Historical Search Copy



R. W. Muir
Registrar-General
of Land

Identifier
Land Registration District
Date Issued

CB39C/436
Canterbury
23 December 1994

Cancelled

Prior References

CB1C/379

Estate Fee Simple
Area 9.8985 hectares more or less
Legal Description Part Rural Section 552

Original Proprietors

Andrew Angus McFarlane

Interests

The right of way granted by Transfer A167326.2 is subject to condition 11 of Council's Consent as set out on Document 251928.1

A152620.7 Transfer creating the following easements in gross - 23.12.1994 at 11.31 am

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Convey electric power	Part Rural Section 552 - herein	Part herein	Southpower Limited	

A167326.2 Transfer creating the following easements - 7.4.1995 at 11.25 am

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Right of way	Lot 3 Deposited Plan 67573 - CT CB39C/435	A DP 67573	Part Rural Section 552 - herein	
Right of way	Part Rural Section 552 - herein	B DP 67573	Lot 3 Deposited Plan 67573	

The easements granted by Transfer A167326.2 are subject to Section 243(a) Resource Management Act 1991

A327825.2 Mortgage to ASB Bank Limited - 25.11.1997 at 9.15 am

5196643.1 Certificate pursuant to Section 224(c) Resource Management Act 1991 (affects DP 82392) - 19.4.2002 at 9:17 am

5196643.2 CTs issued - 19.4.2002 at 9:17 am

Legal Description	Title
Lot 1 Deposited Plan 82392	CB47C/985
Lot 2 Deposited Plan 82392	CB47C/986
Lot 3 Deposited Plan 82392	CB47C/987
Lot 4 Deposited Plan 82392	CB47C/988

CANCELLED AND DUPLICATE DESTROYED

References
Prior C/T 1C/379

Land and Deeds 69

Transfer No.
N/C. Order No. A152620/6



REGISTER

LIMITED AS TO PARCELS
CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

Added -
Section 90 Land
Transfer Act 1952
21.12.1998
[Signature]

No. 39C/436

This Certificate dated the 23rd day of December one thousand nine hundred and ninety-four under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that ANDREW ANGUS McFARLANE of Christchurch, Company Director ---

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 9.8985 hectares or thereabouts being Part Rural Section 552 ---



DISTRICT LAND REGISTRAR

Subject to:

SECTION 243(c) RESOURCE MANAGEMENT ACT 1991

Mortgage 908895/3 to [Signature] Cotterill
Nominees Limited 21.12.1990 at 11.35am
A152617

Christchurch City

No. 924607/1 [Signature] of Encumbrance for the benefit of the Christchurch City Council in Error - 13.3.1994 at 11.35am

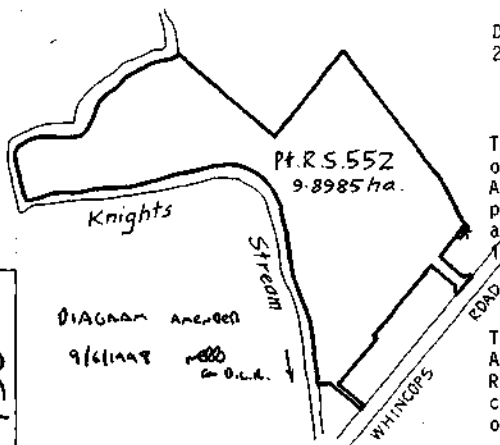
A.L.R.
Transfer A152620/7 granting a right to convey electric power in gross over part herein in favour of Southpower Limited - 23.12.1994 at 11.31am

A.L.R.
Document A152620/8 presented for registration 23.12.1994 and withdrawn 5.1.1995

A.L.R.
Transfer A167326/2 granting rights of way over part Lot 3 DP 67573 (39C/435) marked A on DP 67573 appurtenant hereto and over part herein marked B on DP 67573 appurtenant to Lot 3 DP 67573 - 7.4.1995 at 11.25am

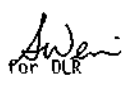

for A.L.R.
The easements granted by Transfer A167326/2 are subject to Section 243 (a) Resource Management Act 1991 and to condition 11 of Council's Consent as set out in Document 251928/1

OVER.....



For dimensions see B/M 315 A.D.P. 967573, 20464, 19863, 18777, 16576
Measurements are Metric

No. 39C/436

CERTIFICATE OF TITLE No. 39C / 436	
A327825.2 Mortgage to ASB Bank Limited 25.11.1997 at 9.15	
 for DLR	
	



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Historical Search Copy**



R. W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier CB47C/986
Land Registration District Canterbury
Date Issued 19 April 2002

Prior References

CB39C/436

Estate Fee Simple
Area 2.1695 hectares more or less
Legal Description Lot 2 Deposited Plan 82392

Original Registered Owners

Andrew Angus McFarlane

Interests

Subject to a right of way over part marked O on DP 82392 created by Transfer A167326.2 - 7.4.1995 at 11:25 am

Appurtenant hereto is a right of way created by Transfer A167326.2 - 7.4.1995 at 11:25 am

The easements granted by Transfer A167326.2 are subject to Section 243(a) Resource Management Act 1991

A327825.2 Mortgage to ASB Bank Limited - 25.11.1997 at 9:15 am

Subject to a right to convey electric power in gross over part marked O on DP 82392 in favour of Southpower Limited created by Transfer A152620.7 - 23.12.1994 at 11:31 am

Appurtenant hereto is a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

Subject to a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications over part marked F on DP 82392 specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

The easements specified in Easement Certificate 5196643.3 are subject to Section 243 (a) Resource Management Act 1991

5196643.4 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 19.4.2002 at 9:17 am

Subject to a right to convey electric power in gross over parts marked Q, P and F on DP 82392 in favour of Orion New Zealand Limited created by Transfer 5196643.6 - 19.4.2002 at 9:17 am

5196643.7 Transfer to Andrew Angus McFarlane - 19.4.2002 at 9:17 am

Land Covenant in Transfer 5196643.7 - 19.4.2002 at 9:17 am

5238481.2 Discharge of Mortgage A327825.2 - 31.5.2002 at 1:15 pm

5535225.2 Surrender of the right of way as appurtenant to CT CB33K/471 specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5535225.3 Variation of the conditions of the easement specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5535225.4 Variation of Covenant 5196643.7 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5628044.1 Transfer to Gregory Howard Clarke and Dorothy Jean Clarke - 19.6.2003 at 9:00 am

5733924.1 Transfer to Anthony Mark Dolan, Jennifer Raewyn Harwood and Matthew Shepherd - 18.9.2003 at 9:00 am

Identifier**CB47C/986**

8504026.1 Mortgage to ANZ National Bank Limited - 12.8.2010 at 3:10 pm

9192340.1 Correction of Name of Matthew Shepherd to Matthew Raymond Shepherd - 8.10.2012 at 3:58 pm

Subject to a right (in gross) to drain water over part marked A on DP 456418 in favour of Christchurch City Council created by Easement Instrument 9192340.2 - 8.10.2012 at 3:58 pm

9456655.6 Surrender of the right of way, right to drain water and sewage and the right to convey water, electronic power and telephonic communications specified in Easement Certificate 5196643.3 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

9456655.7 Surrender of the Land Covenant created by Transfer 5196643.7 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

9989570.1 Transfer to Anthony Mark Dolan and Jennifer Raewyn Harwood - 20.3.2015 at 12:00 pm

11820492.1 CAVEAT BY CRAIG PAUL BURROWES - 4.8.2020 at 4:40 pm

NEW ZEALAND.

Land Transfer (Compulsory
Registration of Titles)
Act, 1924.

Reference:

Deeds Index C. 552

Application No. C. 4770



Register-book,

Vol. 356 folio 17

CANCELLED

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT.

LIMITED AS TO PARCELS AND TITLE

CANCELLED

This Certificate, dated the Twenty-seventh day of June one thousand nine hundred and Twenty-seven
under the hand and seal of the District Land Registrar of the Land Registration District of Canterbury Witnesseth that
EMMA MATHIAS McFARLANE of Halswell Married Woman

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written
or endorsed hereon, subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly
of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered green, be the several admeasurements
a little more or less, that is to say: All that parcel of land containing SIXTY ACRES or thereabouts situated in Blocks III and
XIV of the Christchurch Survey District being part of Rural Section 552 and being more particularly described
in Conveyance Registered No. 126203 [199/695]

Image Quality due
to Condition
of Original



W. M. Thompson
District Land Registrar.

Outstanding Deed of Mortgage No. 134113 [1215/335]
Registered 23rd February 1924 at 11.55 a.m. Canterbury
Catherine Teague to William Woodhead Thompson

Transmission 19755 of Outstanding
Mortgage 134113 to Isaac Woodhead
Thompson, William Thompson and
Edward John Gibson Thompson
as Executors entered 24 November
1927 at 11 a.m.

134113 Charged: The Death
of Isaac Woodhead Thompson
1930 at 2 p.m.

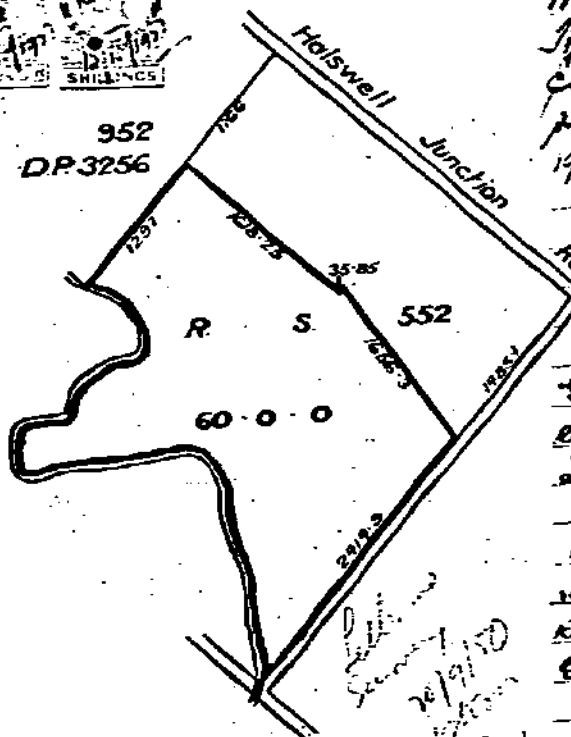
Transmission 23444 to Roydon Pressey
Granger of Christchurch Law Clerk
entered 26 November 1928 at 2.50 p.m.

Mortgage 131621 produced 26 November
1928 at 2.50 p.m. Roydon Pressey Granger
to Frederick William Thompson and
Ernest William Thompson

Transfer 200795 produced 12 December 1931
at 9.22 a.m. Roydon Pressey Granger to
Hubert Joseph McTeigue Ernest James
McTeigue and Charles Graham McTeigue
all of Christchurch farmers as tenants in
common in equal shares



952
DP 3256



Scale: 10 Chains to an Inch

346/17

Mortgage 187528 produced 22 November
1934 at 3pm Hubert Joseph McTeague
Ernest James McTeague and
Charles Matthew McTeague to
Blanche D. McTeague
16-5-1937 Newmarket N.Z. *Colarney*

VALUATION OF 187528 produced
on 13 day of effect of 1937 at 3pm
Newmarket N.Z.

The above limitation as to title has
been removed the 31st day of March
1952. *W. H. H. H.*

5700 loan of 1937. New 187528 has been transferred to the
title. The above provisions to limit the above and have been
transferred 31 March 1952 at 4pm *James*
Section 54(1) 1937

187528 Part cancelled
transferred to Balance
and C.T. Vol 553 folio 44 *James*

CANCELLED.

NEW ZEALAND

Form B.

Register-book.

Vol. 553 . folio 77

Vol. 396, folio 17

Transfer No.

Application No.

Order for N/C No. 361273

Reference:



CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

*Cancelled*Limited as to Parcels

This Certificate, dated the Twentieth day of June one thousand nine hundred and fifty-two under the hand and seal of the District Land Registrar of the Land Registration District of Canterbury. Witnesseth that ROBERT JOSEPH McTEIGUE, ERNEST JAMES McTEIGUE and CHARLES MATTHEW McTEIGUE, all of Christchurch, Farmers are seized of an estate in fee simple as tenants in common in equal shares

~~is seized of an estate in fee simple~~ (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written or endorsed hereon, subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered green, be the several admeasurements a little more or less, that is to say: All that parcel of land containing FIFTY-NINE ACRES THREE ROODES AND SEVEN PERCHES or thereabouts situated in Blocks XIII and XIV of the Christchurch Survey District being part of Rural Section 552

DP 16576

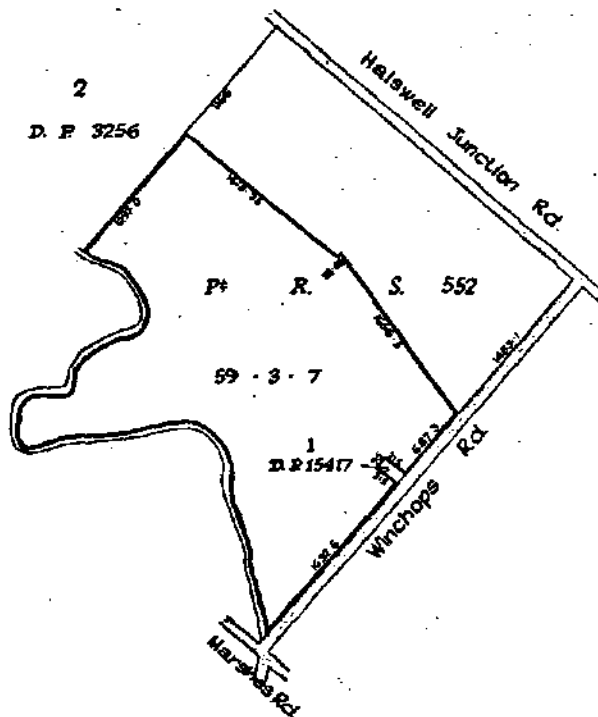


District Land Registrar.

371721 Transfer of Lots 1 and 2 Plan 16576
(Free from Parcel Limitation) Robert
Joseph McTeigue, Ernest James McTeigue
and Charles Matthew McTeigue
to Graham Oakley Adcock produced 20
January 1953 at 11.32 a.m.
569/69 *Amended*

PART CANCELLED

*Cancelled as to Lot 3 Plan 16576
and C.T. 583/27 issued free from Parcel
Limitation
and Cancelled as to Balance
NCO 280123 and C.T. 583/28 issued
on 21/1/53*

*Cancelled*Image Quality due
to Condition
of Original

Scale 10 chains to an inch

Appendix B – Historic Aerials

Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:01 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:02 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:03 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:06 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:05 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:06 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:07 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:08 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



0 0.03 0.05 0.08 0.1
Kilometres

Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:09 PM



Information has been derived from various organisations, including Environment Canterbury and the Canterbury Maps partners. Boundary information is derived under licence from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment Canterbury and the Canterbury Maps partners do not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

Information from this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.



0 0.03 0.05 0.08 0.1 Kilometres

Scale: 1:2,000 @A4

Map Created by MEL on 24/08/2020 at 2:09 PM



Appendix C – LLUR Statement

Malloch Environmental Ltd

Property Statement from the Listed Land Use Register

Visit www.ecan.govt.nz/HAIL for more information about land uses.



Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Date:	24 August 2020	
Land Parcels:	Lot 2 DP 82392	Valuation No(s): 2344801704



The information presented in this map is specific to the area within a 100m radius of property you have selected. Information on properties outside the search radius may not be shown on this map, even if the property is visible.

Summary of sites:

There are no sites associated with the area of enquiry.

Information held about the sites on the Listed Land Use Register

There are no sites associated with the area of enquiry.

Information held about other investigations on the Listed Land Use Register

1 Oct 2008 **INV 2729: Environmental Site Investigation of a proposed residential sub-division at Whincops Road, Halswell (Detailed Site Investigation)**
Pattle Delamore Partners Ltd

Summary of investigation(s):

In October 2008, Pattle Delamore Partners (PDP) performed a Preliminary Site Investigation with preliminary soil sampling across the entire subdivision. More focused soil sampling occurred around areas of interest including above ground and underground fuel storage, storage and use of agrochemicals, sheep treatment, and waste storage. The PDP report also identified a poultry shed, an offal pit, two septic tanks, and areas receiving livestock effluent.

In total 41 samples were collected from the surface soils. The sampling programme assessed the effect of site-wide historical agrichemical applications by carrying out a survey of production land (13 samples), but primarily targeted areas with greater likelihood of ground contamination. Soil samples were collected from dairy yard area, agrichemical shed, barn area, sheep treatment area, and chicken shed area. Fuel storage locations were to be investigated separately. Due to the close proximity of Halswell River tributaries, four sediment samples were collected from two streams at the site (Knights Stream and Quaifes Drain). A single water sample was collected from a tap sourced from an on-site well (M36/0934, 16 m deep). Samples were selectively analysed for total recoverable heavy metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc) and organochlorine pesticides (OCP).

Overall, the majority of the soil results were compliant with the relevant soil guideline values. With the exception of cadmium and low level organochlorine pesticides, samples representing production land generally reported concentrations at or below the anticipated background concentrations. Soil samples from the targeted areas, representing soils in the vicinity of farm sheds and yards, contained cadmium, copper, lead and zinc at concentrations above the anticipated background levels. Organochlorine pesticides were not detected in the single groundwater sample, while all the inorganic contaminants were within the maximum acceptable values in the groundwater sample. A small number of samples contained metals exceeding residential soil guideline values. These were near former barns/sheds, and an historic sheepdip located near the corner of Whincops and Halswell Junction Road.

27 Apr 2012 **INV 10870: Soil sampling investigation of Lot 6 DP 306652 & Lot 1 DP 82392, Knights Stream Park residential subdivision, Halswell, Christchurch (Detailed Site Investigation)**
Pattle Delamore Partners Ltd

Summary of investigation(s):

Site history: The site was used for agricultural cropping and grazing purposes for all of its known history, until it was developed for a residential subdivision in 2012.

Investigation objective: The investigation was undertaken in preparation for soil disturbance associated with the proposed subdivision. The site was investigated and soil contaminants assessed against the requirements of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (MfE, 2011).

Soil samples were collected from six locations across the site. The samples were collected from 0.1 m bgl, and were analysed in the laboratory for heavy metals (arsenic, cadmium, chromium, copper, lead, nickel, and zinc), and organochlorine pesticides.

Results: All heavy metal and organochlorine pesticide concentrations complied with the soil contaminant standards for residential land use. With the exception of cadmium in one sample, all heavy metals were below the expected background concentrations for the area.

Conclusions: The investigation has been categorised as "below guideline values - residential". No site or activity has been created on the LLUR.

Justification for proposed category: Concentrations of all contaminants complied with the soil contaminant standards for residential land use. The site is suitable for the proposed residential subdivision.

For further information from Environment Canterbury, contact Customer Services and refer to enquiry number ENQ261945.

Disclaimer: *The enclosed information is derived from Environment Canterbury's Listed Land Use Register and is made available to you under the Local Government Official Information and Meetings Act 1987 and Environment Canterbury's Contaminated Land Information Management Strategy (ECan 2009).*

The information contained in this report reflects the current records held by Environment Canterbury regarding the activities undertaken on the site, its possible contamination and based on that information, the categorisation of the site. Environment Canterbury has not verified the accuracy or completeness of this information. It is released only as a copy of Environment Canterbury's records and is not intended to provide a full, complete or totally accurate assessment of the site. It is provided on the basis that Environment Canterbury makes no warranty or representation regarding the reliability, accuracy or completeness of the information provided or the level of contamination (if any) at the relevant site or that the site is suitable or otherwise for any particular purpose. Environment Canterbury accepts no responsibility for any loss, cost, damage or expense any person may incur as a result of the use, reference to or reliance on the information contained in this report.

Any person receiving and using this information is bound by the provisions of the Privacy Act 1993.

***Soil Contamination Risk
Detailed Site Investigation Report
and Remediation Action Plan***

***60A Whincops Road,
Halswell, Christchurch***

September 2020



Malloch Environmental Ltd

19 Robertsons Road, Kirwee

RD1, Christchurch 7671

021 132 0321

www.mallochenviro.co.nz

Soil Contamination Investigations • XRF Services • Environmental Planning

QUALITY CONTROL AND CERTIFICATION SHEET

Client: Craig Burrowes

Date of issue: 21 September 2020

Report written by:

Fran Hobkirk, Environmental Scientist, BSc
(3 years contaminated land experience)

Signed: 

Report reviewed and certified as a Suitably Qualified and Experienced Practitioner by:

Nicola Peacock, Principal Environmental Engineer, NZCE, CEnvP
(11 years contaminated land experience within 27 years environmental experience)

Signed: 



CONTENTS

1	Executive Summary.....	4
2	Objectives of the Investigation	4
3	Scope of Work Undertaken.....	5
4	Site Identification	6
5	Site Description and Surrounding Environment	7
6	Geology and Hydrology.....	7
7	Summary of Previous Investigations.....	7
8	Basis for Soil Guideline Values (SGV)	8
8.1	Activity Description	8
8.2	Zoning.....	8
8.3	Soil Guideline Values.....	8
9	Sampling and Analysis Plan and Sampling Methodology	9
10	Field Quality Assurance and Quality Control	9
11	Laboratory Quality Assurance and Quality Control	9
12	Results Analysis and Summary.....	10
13	Site Characterisation and Recommendations.....	10
14	Remedial Actions	11
14.1	Remedial Options and Discussion	11
14.2	Proposed Remedial Goal.....	12
14.3	Proposed Remedial Actions	12
14.4	Regulatory Requirements	12
14.5	Disposal Volumes.....	12
14.6	Unexpected Contaminated Material	12
15	Site Management Plan	12
15.1	Site Setup	12
15.2	Stormwater and Soil Management.....	13
15.3	Dust Control	13
15.4	Occupational Safety and Health Issues and Measures	13
16	Validation Sampling	13
17	Conclusion.....	13
18	Limitations.....	14

APPENDICES

- A Sample Location Plan
- B Table of Laboratory Results
- C Laboratory Reports

1 Executive Summary

The subject site is a single rural residential lot with street address 60A Whincops Road, Halswell, Christchurch. It is proposed to subdivide and develop the lot for residential development. This proposal would change the use of the land and result in disturbance of soils. The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCSC) require an assessment of the likelihood of soil contamination being present. It is noted also that Malloch Environmental Ltd is obligated to consider the requirements of Section 10 (4) of the Health and Safety at Work (Asbestos) Regulations 2016. This report details the work undertaken to assess the risks.

A Preliminary Site Investigation was completed by Malloch Environmental Ltd in September 2020. It identified a risk area within and to the rear of the yard on the subject site. There is a risk of contamination by heavy metals, PAHs and TPH from current and historical activities including:

- Storage and possible historical dismantling of vehicles
- Storage of tyres
- Storage of treated timber
- Waste oil drums
- A burn drum

The location of the risk area is shown on the Risk Area Plan in Section 7 of this report. These are confirmed or likely HAIL activities and there may be a risk to human health from potentially contaminated soils in this area. It was recommended that a Detailed Site Investigation, in terms of the Ministry for the Environment's Contaminated Land Management Guidelines, be undertaken on identified risk area prior to any change of use or development.

This Detailed Site Investigation has shown the hardpacked gravel within the yard area of the subject site has irregular arsenic and lead contamination above 'residential 10% produce' soil guideline values. There is considered to be a moderate risk to human health if this area were used for a residential use. It is recommended that the contaminated area be remediated. It is proposed to remediate the yard by excavating and disposing of the affected material to an authorised facility. Full validation of the area will be carried out and a validation report will be provided to the authorities.

In terms of planning status at the time of writing of this report, the NESCSC does apply to the site and resource consent under the NESCSC would be required for the proposed subdivision and the remediation works which will involve soil disturbance and is to be obtained prior to any remediation works commencing.

2 Objectives of the Investigation

This report has been prepared in accordance with the Ministry for the Environment's "Contaminated Land Management Guidelines No 1: Reporting on Contaminated Sites in New Zealand". This report includes all requirements for a Stage 2 Detailed Site Investigation Report and a Stage 3 Remediation Action Plan.

The objectives include determining the extent and type of any contamination present that would pose a risk to human health and to outline the remediation proposals for the site which will ensure that the site is suitable for a residential use.

3 Scope of Work Undertaken

The scope of the work undertaken has included:

- Review of previous Malloch Environmental Ltd investigation
- On site soil sampling
- Analysis of results
- Development of remediation action plan
- Preparation of report in accordance with MfE guidelines

4 Site Identification

The subject site has street address 60A Whincops Road, Halswell, Christchurch as shown on the plan in **Figure 1** below. The subject site is legally described as Lot 2 DP 82392 and has a total area of approximately 2.1695Ha.

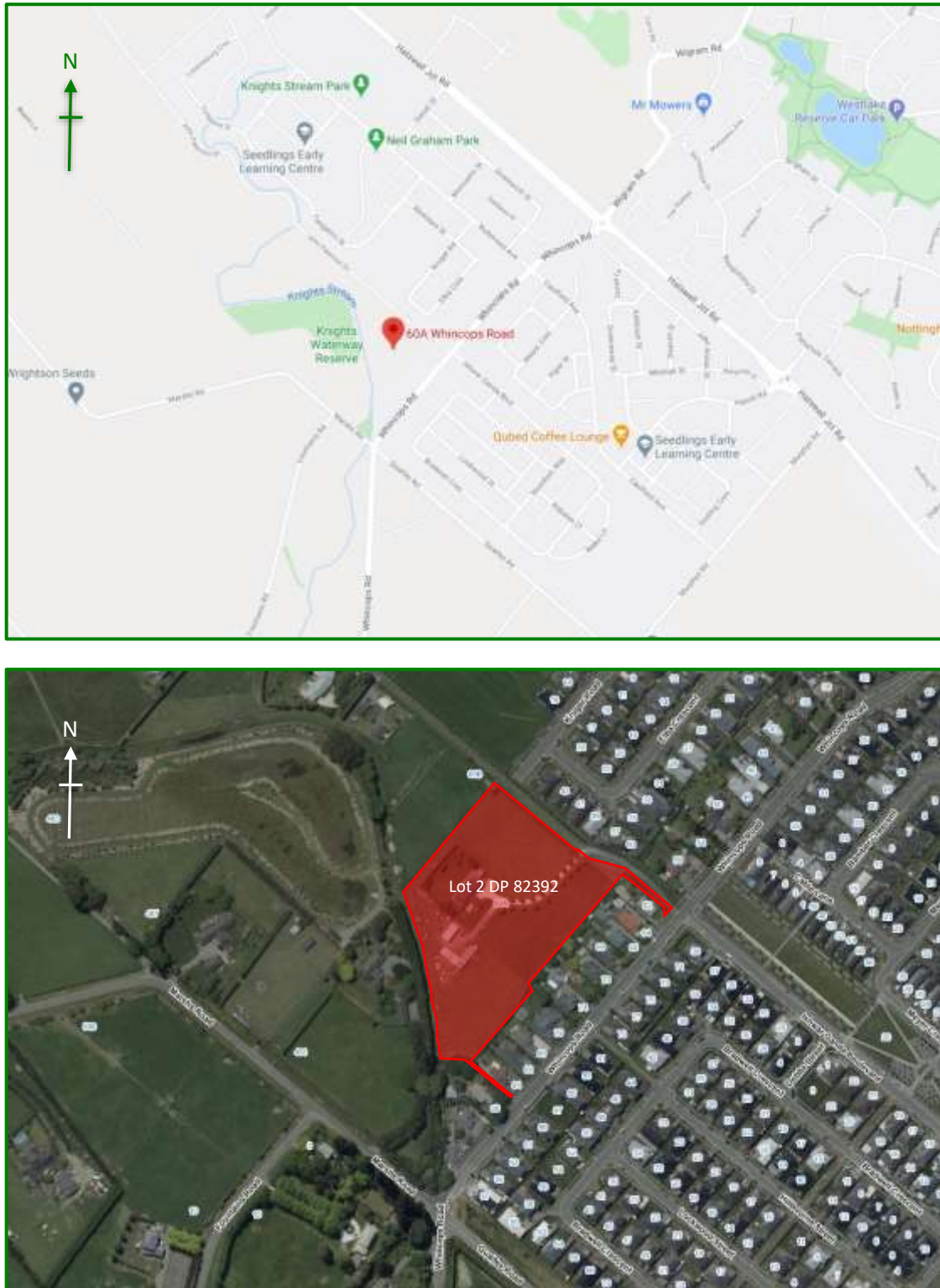


Figure 1 – Location Plan

5 Site Description and Surrounding Environment

The subject site is flat rural residential land in Halswell, Christchurch. There is a dwelling and three farm sheds on the subject site. The subject site is clearly defined by existing hedges and fences. It is bounded to the east by residential land. It is bounded to the west by rural residential land and Knights Waterway Reserve.

6 Geology and Hydrology

The ECan GIS describes the soils as Kaiapoi deep silty loam. Soil trace elements are 'Regional, Recent'. Wells in the area indicate that topsoils are underlain by sandy gravels.

The site lies over the coastal confined gravel aquifer system. Ground water levels recorded on nearby bore logs are between 2.80m and 5.49m deep. The direction of ground water flow is generally in a south-easterly direction. ECan's GIS shows two active wells on the subject site. The nearest downgradient well is a domestic supply well approximately 16m south-east of the subject site.

There are no open water features on the subject site. Knights Stream, an ephemeral waterway, runs along the outside of the western boundary.

7 Summary of Previous Investigations

A Preliminary Site Investigation was completed by Malloch Environmental Ltd in February 2019. It reviewed information from historical aerial photographs, historical title information, the ECan Listed Land Use Register (LLUR), the ECan resource consents database and the Christchurch City Council property files. The investigation identified a risk area within and to the rear of the yard on the subject site. There is a risk of contamination by heavy metals, PAHs and TPH from current and historical activities including:

- Storage and possible historical dismantling of vehicles
- Storage of tyres
- Storage of treated timber
- Waste oil drums
- A burn drum

The location of the risk area is shown on the Risk Area Plan in **Figure 2** below. These are confirmed or likely HAIL activities and there may be a risk to human health from potentially contaminated soils in this area. It was recommended that a Detailed Site Investigation, in terms of the Ministry for the Environment's Contaminated Land Management Guidelines, be undertaken on identified risk area prior to any change of use or development.



Figure 2 – Risk Area Plan

8 Basis for Soil Guideline Values (SGV)

8.1 Activity Description

This report has been written for the following potential activities:

- Subdivision and development of the site for residential use,
- Soil disturbance activities associated with the above use and development of the site

8.2 Zoning

The subject site is currently zoned Residential Suburban Zone.

8.3 Soil Guideline Values

Human health soil contaminant standards for a group of 12 priority contaminants were derived under a set of five land-use scenarios and are legally binding under The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Health) Regulations 2011 (NESC). These standards have been applied where applicable. The regulations describe these as Soil Contaminant Standards. For contaminants other than the 12 priority contaminants, the hierarchy as set out in the Ministry for the Environment Contaminated Land Management Guidelines No 2 has been followed. These are generally described as Soil Guideline Values. For simplicity, this report uses the terminology Soil Guideline Values (SGV) when referring to the appropriate soil contaminant standard or other derived value from the hierarchy. For soil, guideline values are predominantly risk based, in that they are typically derived using designated exposure scenarios that relate to different land uses. For each exposure scenario, selected pathways of exposure are used to derive guideline values.

These pathways typically include soil ingestion, inhalation and dermal adsorption. The guideline values for the appropriate land use scenario relate to the most critical pathway.

The land-use scenarios applicable for this site would be 'residential 10% produce' and 'commercial/industrial/outdoor maintenance workers' as a proxy for construction workers disturbing soils.

9 Sampling and Analysis Plan and Sampling Methodology

As recommended by the Preliminary Site Investigation this Detailed Site Investigation was undertaken to assess the extent of any contamination within the identified risk area.

A judgemental sampling strategy was used.

- SS1 was placed adjacent to the burn drum and waste oil drums
- SS2 was placed where metal items and machinery were stored next to a fence
- SS3 was placed within the shed with a shingle floor, an oil stain was present
- SS4 was placed in the centre of the yard
- SS5 was placed where metal items were stored in the corner of the yard
- SS6 was placed where tyres were stored on the ground
- SS7, SS9, SS10 & SS11 were placed where machinery has been stored along the edges of the paddock to the rear of the yard.
- SS8 was placed adjacent to a pile of treated timber

In total eleven locations were sampled at the surface and 250mm depth, except for SS5 which was only sampled at the surface. Twenty-two samples including a duplicate were sent to Analytica Laboratories. The surface samples were all analysed for heavy metals. The surface sample from SS1 was also analysed for TPH and PAH. The surface sample from SS3 was also analysed for TPH.

After initial results indicated that the residential SGV was exceeded for arsenic at SS1, SS2 and SS3, the 250mm depth samples at these locations were analysed for heavy metals.

See **Appendix A** for the sample location plan.

10 Field Quality Assurance and Quality Control

The Contaminated Land Management Guidelines No 5, Ministry for the Environment was followed for all aspects of the investigation. Field quality control and decontamination procedures were followed. Samples were taken using a stainless-steel trowel or fresh disposable nitrile gloves. All equipment was decontaminated between samples using Decon 90 and rinsed with tap water.

Samples were collected in laboratory supplied containers and immediately placed in chilled bins. Following sampling, the samples were delivered to Analytica Laboratory under chain-of-custody documentation.

11 Laboratory Quality Assurance and Quality Control

All laboratory tested samples were submitted to Analytica Laboratories in Hamilton for analysis. Hill Laboratories hold IANZ accreditation. As part of holding accreditation the laboratory follows appropriate testing and quality control procedures. No quality control issues were reported.

12 Results Analysis and Summary

The laboratory results showed three samples, SS1.1, SS3.1 & SS4.1, contained arsenic above the 'residential 10% produce' SGV for arsenic of 20mg/kg. The highest arsenic concentration was 56.9mg/kg in sample SS1.1. Another sample, SS5.1, slightly exceeded the 'residential 10% produce' SGV for lead of 210mg/kg with a concentration of 212mg/kg. All these samples were taken from the surface soils within the yard area of the site. Arsenic and lead were below background levels in the samples taken from SS1, SS3 & SS4 at 250mm depth. No 250mm depth sample was available for SS5 but given the results shown at this depth in the other samples and the marginal exceedance in the surface sample it is considered highly likely that lead and arsenic would also be below background level at 250mm depth at this location.

Zinc exceeded the ecological guideline value in three samples. Nickel exceeded the ecological guideline value in one sample. All but one of the yard samples analysed showed at least one heavy metal above expected background levels. Two of the samples from the paddock exceeded the expected background level for zinc.

Traces of PAH compounds including Benzo(a)pyrene were detected in sample SS1.1. However, the levels are well below the 'residential 10% produce' SGVs and also below the accepted background levels. The TPH results showed C15-C36 fraction hydrocarbons are present at SS1 and SS3 but there is no limit for this fraction for residential use.

A table of laboratory results is shown in **Appendix B**. Copies of the Laboratory Reports are included in **Appendix C**.

13 Site Characterisation and Recommendations

Soil sampling has confirmed there is arsenic and lead contamination above the 'residential 10% produce' SGVs within the hardpacked gravel of the yard area of the subject site. The affected area is not fully delineated but irregular contamination across the surface of this gravel is considered likely. Analysis of samples taken from 250mm indicates the contamination is likely restricted to the top 200-250mm. The gravel area is shown on the sample location plan in **Appendix A** and covers approximately 460m².

The following conceptual site model addresses the risks associated with the identified contaminants:

Conceptual Site Model				
Source	Pathways		Receptor	Risk Assessment
Approximately 460m ² with irregular arsenic and lead contamination. Highest arsenic result was 56.9 mg/kg, exceeding the 'residential 10% produce' SGV.	Human	Dermal contact, ingestion and inhalation	Future site occupiers / land users	Moderate risk to human health in a residential use.
			Workers involved in soil disturbance at the site	Low risk to human health as the levels are well below the commercial / outdoor worker SGVs of 70mg/kg for arsenic and 3300mg/kg for lead.
	Ecological	Infiltration through soils to groundwater	Groundwater is assumed to be 2.80-5.49m deep at the site	Low risk as heavy metals bind well to the soils, and testing has shown the contamination is likely to be limited to the top 250mm of soil.
		Surface runoff to waterways	Knights Stream, an ephemeral waterway, is approx. 20m from the affected area.	Low risk of contaminated soils entering surface waters in rainfall events during soil disturbance activities as remediation work will not take place during heavy rain or high wind.

It is recommended that the arsenic and lead contaminated soils be remediated prior to any other soil disturbance activities occurring on the site.

14 Remedial Actions

14.1 Remedial Options and Discussion

The remediation options considered include:

- Leaving the contaminated soils in-situ
- Mixing contaminated soil with clean soil to dilute contaminant concentrations
- Excavating and removing all contaminated soils and disposal to an approved landfill or location

Leaving the contaminated soils in-situ is not an option as the contamination exceeds the soil guideline value for a residential use.

Although the levels of arsenic and lead are moderate, the affected material is hardpacked gravel and silt. This material is unlikely to be suitable for mixing with other soils on the site. Additionally, this would result in a larger area being identified as having contamination above background levels, and may have implications on future development or subdivision.

Excavation and disposal to an authorised facility is likely to be the most viable remediation option for this material.

14.2 Proposed Remedial Goal

The remediation goal is to ensure that the remaining soils have arsenic and lead concentrations below the residential 10% produce SGV of 20mg/kg for arsenic and 210mg/kg for lead.

14.3 Proposed Remedial Actions

When the sheds are removed from the site the top 200mm of hardpacked gravel should be excavated across the yard area. All soils should be disposed of at an authorised facility for disposal. A portable XRF may be used during remediation to ensure the minimum volume of soil is removed from the site whilst also ensuring the remediation goal is met. Following removal of the contaminated soils, validation of the excavated area using portable XRF and laboratory sampling will be undertaken.

14.4 Regulatory Requirements

Resource consent is required from Christchurch City Council in terms of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations, prior to any remediation works occurring.

14.5 Disposal Volumes

It is estimated that approximately 90 - 115 cubic metres (in-situ volume) of material will need to be removed from site and disposed of at an authorised facility.

14.6 Unexpected Contaminated Material

During the excavation works if any other hazardous material is encountered in significant volumes that pose a threat to the health of workers on site, all works will cease until the hazardous material has been assessed by a Suitably Qualified and Experienced Practitioner (SQEP) in accordance with MfE guidelines.

15 Site Management Plan

15.1 Site Setup

Prior to any works commencing the following should be in place on site:

- Contaminated areas should be clearly identified with site entry and exits, and paths to the disposal location planned before works commence
- Appropriate washing facilities should be put in place to clean any equipment exposed to contaminated soils
- Hand washing facility must be available for all workers, in the immediate area of the work site
- Remediation should be planned in advance to ensure it occurs in a staged approach/methodical manner to ensure that vehicles do not track contaminated soils onto clean areas
- A complete copy of the Detailed Site Investigation Report and this Remediation Action Plan should be provided to the contractor prior to any works commencing

15.2 Stormwater and Soil Management

Remediation work will not take place during heavy rain or high wind. As the work is predominantly excavation below the ground surface, it is expected that any rainfall occurring after the excavation is completed, will be trapped within the excavated area and not run off to any other part of the site. If rainfall occurs and tracking of wet contaminated soils to other parts of the site becomes a risk, work will cease. Soil will be loaded directly onto trucks and will not be stockpiled on site, other than within the excavated area.

Appropriate controls should be in place to ensure unintentional tracking or movement of contaminated soils to other parts of the site, or off-site, does not occur.

15.3 Dust Control

Water will be made available at the remediation site with operators available, and will be used to keep the dust emissions to an acceptable level to protect human health, as required.

All vehicles transporting soils will use tarpaulins to prevent dust emissions if required.

15.4 Occupational Safety and Health Issues and Measures

The contractor shall prepare a site specific Health and Safety Plan covering all relevant matters and all workers will be inducted prior to site works beginning. As a minimum, the following matters will need to be included:

- Appropriate personal protection gear which should include as a minimum, head to toe clothing, the use of gloves for any worker handling soil, dust masks to prevent ingestion of contaminated dust particles, safety footwear, hard hats and hi-vis vests
- Appropriate hand washing measures to prevent ingestion of contaminated soil particles
- Truck loading procedures and spill prevention
- Decontamination measures for all equipment

16 Validation Sampling

Following the removal of the contaminated soils, site validation by XRF will be conducted as well as soil sampling for laboratory testing. The validation samples will be tested for heavy metals. Results will be compared with the guideline values outlined in the remediation goal above.

Where validation sampling reveals remaining contaminated soils, further remediation works shall be carried out in a similar manner as above, by means of excavation and disposal. A Validation Report will be produced and provided to Christchurch City Council and ECan.

17 Conclusion

These investigations have shown the hardpacked gravel within the yard area of the subject site has irregular arsenic and lead contamination above 'residential 10% produce' soil guideline values. There is considered to be a moderate risk to human health if this area were used for a residential use. It is recommended that the contaminated area be remediated. It is proposed to remediate the yard by excavating and disposing of the affected material to an authorised facility. Full validation of the area will be carried out and a validation report will be provided to the authorities.

18 Limitations

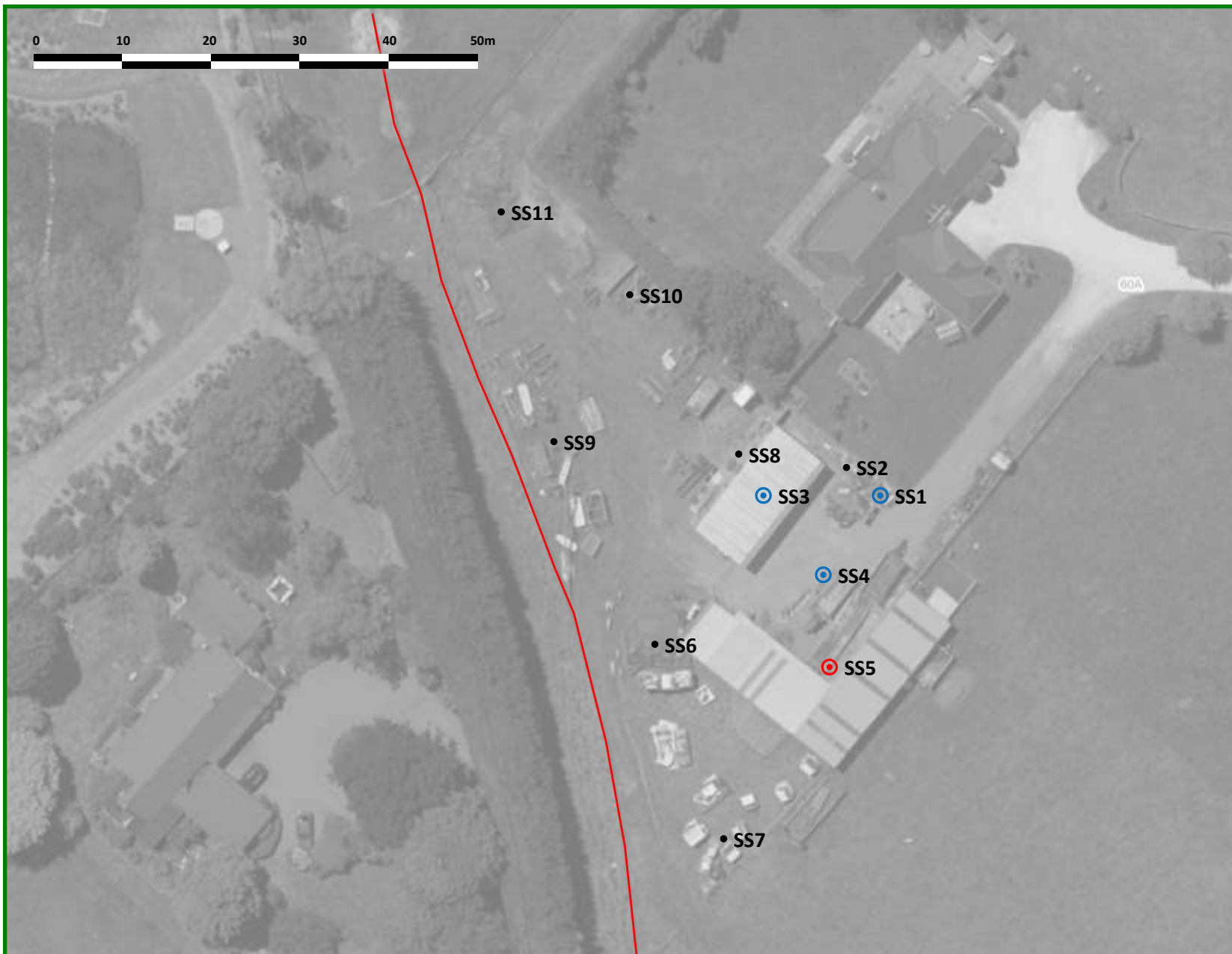
Malloch Environmental Limited has performed services for this project in accordance with current professional standards for environmental site assessments, and in terms of the client's financial and technical brief for the work. Any reliance on this report by other parties shall be at such party's own risk. It does not purport to completely describe all the site characteristics and properties. Where data is supplied by the client or any third party, it has been assumed that the information is correct, unless otherwise stated. Malloch Environmental Limited accepts no responsibility for errors or omissions in the information provided. Should further information become available regarding the conditions at the site, Malloch Environmental Limited reserves the right to review the report in the context of the additional information.

Opinions and judgments expressed in this report are based on an understanding and interpretation of regulatory standards at the time of writing and should not be construed as legal opinions. As regulatory standards are constantly changing, conclusions and recommendations considered to be acceptable at the time of writing, may in the future become subject to different regulatory standards which cause them to become unacceptable. This may require further assessment and/or remediation of the site to be suitable for the existing or proposed land use activities. There is no investigation that is thorough enough to preclude the presence of materials at the site that presently or in the future may be considered hazardous.

This report does not attempt to describe all risks or possible outcomes resulting from carrying out remediation works. Any party carrying out remediation works shall be responsible for all such works, including implementing all health and safety precautions as appropriate. Malloch Environmental Limited disclaims all liability whatsoever for any loss or damages, if any, suffered by any party as a result of any remediation works undertaken.

No part of this report may be reproduced, distributed, publicly displayed, or made into a derivative work without the permission of Malloch Environmental Ltd, other than the distribution in its entirety for the purposes it is intended.

Appendix A – Sample Location Plan



Plan must be printed
in colour



LEGEND

- SS1 Soil sample location
- ⊙ SS1 Soil sample location that exceeds the residential SGV for lead
- ⊙ SS1 Soil sample location that exceeds the residential SGV for arsenic

Notes:

1. This plan has been prepared for soil contamination risk assessment purposes only. No liability is accepted if the plan is used for any other purposes.
2. Any measurements taken from this plan which are not dimensioned on the electronic copy are at the risk of the user.
3. Soil sample locations are approximate only.



Malloch Environmental Ltd

19 Robertsons Road, Kirwee
RD1, Christchurch 7671
021 132 0321
www.mallochenviron.co.nz

Sampling Location Plan 60A Whincops Road, Christchurch

Scale: NTS

Date: 14 September 2020

Drawing No: 01483/1

Appendix B – Table of Laboratory Results

Table of Laboratory Results - 60A Whincops Road, Christchurch

Date of testing: 9th September 2020

Yard Samples

Analyte	Sample Name:	SS1.1	SS1.2	SS2.1	SS3.1	SS3.2	SS4.1	SS4.2	SS5.1	Soil Guideline Values					
Soil Results	Lab Number:	20-33499-1	20-34327-1	20-33499-3	20-33499-5	20-34327-2	20-33499-7	20-34327-3	20-33499-9	Residential 10% Produce	Commercial/ Outdoor Worker	Reference	Ecological receptors	Reference	Background ₁
	Depth (mm):	0-50	250mm	0-50	0-50	250mm	0-50	250mm	0-50						
Heavy Metals															
Total Recoverable Arsenic	mg/kg dry wt	56.9	9.5	12	23.2	6.6	20.6	9.1	19.3	20	70	NES	70	ANZWQ	12.58
Total Recoverable Cadmium	mg/kg dry wt	0.48	0.11	0.12	0.12	0.17	0.941	0.17	1.07	3	1,300	NES	10	ANZWQ	0.19
Total Recoverable Chromium	mg/kg dry wt	32.1	20.8	20.2	36.9	22.8	59.9	25.3	126	460	6,300	NES	370	ANZWQ	22.70
Total Recoverable Copper	mg/kg dry wt	40.8	13.2	40.9	29.2	12.2	182	37.7	237	>10,000	>10,000	NES	270	ANZWQ	20.30
Total Recoverable Lead	mg/kg dry wt	26.9	19	22.4	22.7	21.6	96.2	30.2	212	210	3,300	NES	220	ANZWQ	40.96
Total Recoverable Nickel	mg/kg dry wt	12.9	14.7	12.6	12.8	12.3	29.1	12.7	54.3	400	6,000	NEPM	52	ANZWQ	20.70
Total Recoverable Zinc	mg/kg dry wt	765	67.1	242	110	63.5	592	171	626	7,400	400,000	NEPM	410	ANZWQ	93.94

Paddock Samples

Analyte	Sample Name:	SS6.1	SS7.1	SS7.2	SS8.1	SS9.1	SS10.1	SS11.1	RPD	Soil Guideline Values					
Soil Results	Lab Number:	20-33499-10	20-33499-12	20-33499-13	20-33499-15	20-33499-17	20-33499-19	20-33499-21	SS7.1 & SS7.2	Residential 10% Produce	Commercial/ Outdoor Worker	Reference	Ecological receptors	Reference	Background ₁
	Depth (mm):	0-50	0-50	0-50	0-50	0-50	0-50	0-50							
Heavy Metals															
Total Recoverable Arsenic	mg/kg dry wt	9.1	7.6	7.4	5.3	5.6	5.5	7.4	3%	20	70	NES	70	ANZWQ	12.58
Total Recoverable Cadmium	mg/kg dry wt	0.097	0.1	0.11	0.15	0.12	0.12	0.16	10%	3	1,300	NES	10	ANZWQ	0.19
Total Recoverable Chromium	mg/kg dry wt	13.8	16.3	16.1	15.7	16.3	16.2	17.9	1%	460	6,300	NES	370	ANZWQ	22.70
Total Recoverable Copper	mg/kg dry wt	15	17.8	17.4	11.7	11.4	9.97	16.9	2%	>10,000	>10,000	NES	270	ANZWQ	20.30
Total Recoverable Lead	mg/kg dry wt	18.9	22.5	23.4	22.3	21.7	20.7	21.7	4%	210	3,300	NES	220	ANZWQ	40.96
Total Recoverable Nickel	mg/kg dry wt	8.36	12.7	12.7	11	12.2	12	12	0%	400	6,000	NEPM	52	ANZWQ	20.70
Total Recoverable Zinc	mg/kg dry wt	200	90.4	91.6	98.3	70.9	66.4	69.2	1%	7,400	400,000	NEPM	410	ANZWQ	93.94

Analyte	Sample Name:	SS1.1	Soil Guideline Values			
Soil Results	Lab Number:	20-33499-1	Residential 10% Produce	Commercial/ Outdoor Worker	Reference	Background ₂
	Depth (mm):	0-50				
Polycyclic Aromatic Hydrocarbons						
Benzo[a]pyrene *	mg/kg dry wt	0.02	-	-	-	0.595
Chrysene *	mg/kg dry wt	0.02	-	-	-	0.539
Fluoranthene *	mg/kg dry wt	0.03	-	-	-	1.345
Phenanthrene	mg/kg dry wt	0.02	900	-	GAS	0.703
Pyrene	mg/kg dry wt	0.03	1,500	-	GAS	1.362
Benzo[a]pyrene TEQ (LOR)	mg/kg dry wt	0.03	10	35	NES	0.922
Benzo[a]pyrene TEQ (Zero)	mg/kg dry wt	0.02	10	35	NES	0.922
All other analytes in the PAH suite were below the laboratory limit of detection						

* Analyte included in Benzo(a)pyrene TEQ calculation

Analyte	Sample Name:	SS1.1	SS3.1	Soil Guideline Values		
Soil Results	Lab Number:	20-33499-1	20-33499-5	Residential 10% Produce	Commercial/ Outdoor Worker	Reference
	Depth (mm):	0-50	0-50			
TPH in Soil						
C7-C9	mg/kg dry wt	<10	<10	500	500	PHCS
C10-C14	mg/kg dry wt	<15	<15	510	1,700	PHCS
C15-C36	mg/kg dry wt	212	894	No Limit	No Limit	PHCS
C7-C36 (Total)	mg/kg dry wt	212	894	-	-	-

Indicates result exceeds residential guideline value

Indicates result exceeds ecological guideline value

Indicates result exceeds background value for soil type

NES - National Environmental Standard for Assessing and Managing Contaminants in Soils, MfE
NEPM - National Environmental Protection Measures 2013, Formerly NEPC, Australia
ANZWQ - Australian and New Zealand - Guidelines for Fresh and Marine Water Quality (online)- Sediment GV-high
PHCS - Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE 1999), sandy silt soil type
GAS - Users' Guide to the Guidelines for Assessing and Managing Contaminated Gasworks Sites in New Zealand (MfE, 1997)
₁ Concentrations for 'Regional, Recent' soil group from Background concentrations in Canterbury soils, Tonkin and Taylor, July 2007
₂ Background concentrations of polycyclic aromatic hydrocarbons in Christchurch urban soils, Tonkin and Taylor, Nov 2007

Appendix C – Laboratory Reports



Certificate of Analysis

Malloch Environmental Ltd
19 Robertsons Road, Kirwee
Christchurch 7671

Attention: Fran Hobkirk
Phone: 021 0527 731
Email: fran@mallochenviron.co.nz

Sampling Site: 60A Whincops Road

Lab Reference: 20-33499
Submitted by: Fran Hobkirk
Date Received: 10/09/2020
Testing Initiated: 10/09/2020
Date Completed: 14/09/2020
Order Number:
Reference: 483

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories. Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Heavy Metals in Soil

Client Sample ID			SS1.1 0-50	SS2.1 0-50	SS3.1 0-50	SS4.1 0-50	SS5.1 0-50
Date Sampled			9/09/2020	9/09/2020	9/09/2020	9/09/2020	9/09/2020
Analyte	Unit	Reporting Limit	20-33499-1	20-33499-3	20-33499-5	20-33499-7	20-33499-9
Arsenic	mg/kg dry wt	0.125	56.9	12	23.2	20.6	19.3
Cadmium	mg/kg dry wt	0.005	0.48	0.12	0.12	0.941	1.07
Chromium	mg/kg dry wt	0.125	32.1	20.2	36.9	59.9	126
Copper	mg/kg dry wt	0.075	40.8	40.9	29.2	182	237
Lead	mg/kg dry wt	0.25	26.9	22.4	22.7	96.2	212
Nickel	mg/kg dry wt	0.05	12.9	12.6	12.8	29.1	54.3
Zinc	mg/kg dry wt	0.05	765	242	110	592	626

Heavy Metals in Soil

Client Sample ID			SS6.1 0-50	SS7.1 0-50	SS7.2 0-50	SS8.1 0-50	SS9.1 0-50
Date Sampled			9/09/2020	9/09/2020	9/09/2020	9/09/2020	9/09/2020
Analyte	Unit	Reporting Limit	20-33499-10	20-33499-12	20-33499-13	20-33499-15	20-33499-17
Arsenic	mg/kg dry wt	0.125	9.1	7.6	7.4	5.3	5.6
Cadmium	mg/kg dry wt	0.005	0.097	0.10	0.11	0.15	0.12
Chromium	mg/kg dry wt	0.125	13.8	16.3	16.1	15.7	16.3
Copper	mg/kg dry wt	0.075	15.0	17.8	17.4	11.7	11.4
Lead	mg/kg dry wt	0.25	18.9	22.5	23.4	22.3	21.7
Nickel	mg/kg dry wt	0.05	8.36	12.7	12.7	11.0	12.2
Zinc	mg/kg dry wt	0.05	200	90.4	91.6	98.3	70.9

Heavy Metals in Soil

Client Sample ID			SS10.1 0-50	SS11.1 0-50
Date Sampled			9/09/2020	9/09/2020
Analyte	Unit	Reporting Limit	20-33499-19	20-33499-21
Arsenic	mg/kg dry wt	0.125	5.5	7.4
Cadmium	mg/kg dry wt	0.005	0.12	0.16
Chromium	mg/kg dry wt	0.125	16.2	17.9
Copper	mg/kg dry wt	0.075	9.97	16.9
Lead	mg/kg dry wt	0.25	20.7	21.7
Nickel	mg/kg dry wt	0.05	12.0	12.0
Zinc	mg/kg dry wt	0.05	66.4	69.2

Total Petroleum Hydrocarbons - Soil

Client Sample ID			SS1.1 0-50	SS3.1 0-50
Date Sampled			9/09/2020	9/09/2020
Analyte	Unit	Reporting Limit	20-33499-1	20-33499-5
C7-C9	mg/kg dry wt	10	<10	<10
C10-C14	mg/kg dry wt	15	<15	<15
C15-C36	mg/kg dry wt	25	212	894
C7-C36 (Total)	mg/kg dry wt	50	212	894

Polycyclic Aromatic Hydrocarbons - Soil

Client Sample ID			SS1.1 0-50
Date Sampled			9/09/2020
Analyte	Unit	Reporting Limit	20-33499-1
1-Methylnaphthalene	mg/kg dry wt	0.01	<0.01
2-Methylnaphthalene	mg/kg dry wt	0.01	<0.01
Acenaphthene	mg/kg dry wt	0.01	<0.01
Acenaphthylene	mg/kg dry wt	0.01	<0.01
Anthracene	mg/kg dry wt	0.01	<0.01
Benz[a]anthracene	mg/kg dry wt	0.02	<0.02
Benzo[a]pyrene	mg/kg dry wt	0.01	0.02
Benzo[b] & [j] fluoranthene	mg/kg dry wt	0.02	<0.02
Benzo[g,h,i]perylene	mg/kg dry wt	0.02	<0.02
Benzo[k]fluoranthene	mg/kg dry wt	0.01	<0.01
Chrysene	mg/kg dry wt	0.01	0.02
Dibenz(a,h)anthracene	mg/kg dry wt	0.01	<0.01
Fluoranthene	mg/kg dry wt	0.02	0.03
Fluorene	mg/kg dry wt	0.01	<0.01
Indeno(1,2,3-cd)pyrene	mg/kg dry wt	0.01	<0.01
Naphthalene	mg/kg dry wt	0.01	<0.01
Phenanthrene	mg/kg dry wt	0.01	0.02
Pyrene	mg/kg dry wt	0.02	0.03
Benzo[a]pyrene TEQ (LOR)	mg/kg dry wt	0.03	0.03
Benzo[a]pyrene TEQ (Zero)	mg/kg dry wt	0.01	0.02
Anthracene-d10 (Surrogate)	%	1	114.1

Moisture Content

Client Sample ID			SS1.1 0-50	SS3.1 0-50
Date Sampled			9/09/2020	9/09/2020
Analyte	Unit	Reporting Limit	20-33499-1	20-33499-5
Moisture Content	%	1	26	7

Method Summary

- Elements in Soil** Samples dried and passed through a 2 mm sieve followed by acid digestion and analysis by ICP-MS. In accordance with in-house procedure based on US EPA method 200.8.
- TPH in Soil** Solvent extraction, silica cleanup, followed by GC-FID analysis. (C7-C36). (In accordance with in-house procedure based on US EPA 8015).
- PAH in Soil** Solvent extraction, silica cleanup, followed by GC-MS analysis.
Benzo[a]pyrene TEQ (LOR): The most conservative TEQ estimate, where a result is reported as less than the limit of reporting (LOR) the LOR value is used to calculate the TEQ for that PAH.
Benzo[a]pyrene TEQ (Zero): The least conservative TEQ estimate, PAHs reported as less than the limit of reporting (LOR) are not included in the TEQ calculation.
Benzo[a]pyrene toxic equivalence (TEQ) is calculated according to '*Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health*'. Ministry for the Environment. 2011. (In accordance with in-house procedure).
- Moisture** Moisture content is determined gravimetrically by drying at 103 °C.



Emily Hanna, B.Sc.

Trace Elements Team Leader



Rong Zhang

Technician

Appendix E: Record of Title



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**



R.W. Muir
Registrar-General
of Land

Identifier **CB47C/988**
Land Registration District **Canterbury**
Date Issued 19 April 2002

Prior References

CB39C/436

Estate	Fee Simple
Area	2.4666 hectares more or less
Legal Description	Lot 4 Deposited Plan 82392

Registered Owners

Brian David Hall

Interests

Appurtenant hereto is a right of way created by Transfer A167326.2 - 7.4.1995 at 11:25 am

The easement created by Transfer A167326.2 is subject to Section 243 (a) Resource Management Act 1991

Appurtenant hereto is a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

Subject to a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications over parts marked B, G and H, a right of way, right to convey electric power and telephonic communications over parts marked L, M and N on DP 82392 and a right to drain sewage over part marked M on DP 82392 specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

The easements specified in Easement Certificate 5196643.3 are subject to Section 243 (a) Resource Management Act 1991

5535225.2 Surrender of the right of way as appurtenant to CT CB33K/471 specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5196643.4 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 19.4.2002 at 9:17 am

Subject to a right to drain sewage in gross over parts marked H and M on DP 82392 in favour of Christchurch City Council created by Transfer 5196643.5 - 19.4.2002 at 9:17 am

The easement created by Transfer 5196643.5 is subject to Section 243 (a) Resource Management Act 1991

Subject to a right to convey electric power in gross over parts marked L, M, H, G and B on DP 82392 in favour of Orion New Zealand Limited created by Transfer 5196643.6 - 19.4.2002 at 9:17 am

Land Covenant in Transfer 5196643.7 - 19.4.2002 at 9:17 am

5535225.3 Variation of the conditions of the easement specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5535225.4 Variation of Covenant 5196643.7 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

Appurtenant hereto is a right to convey electricity created by Transfer 5535225.9 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

The easements created by Transfer 5535225.9 are subject to Section 243 (a) Resource Management Act 1991

6963203.1 Mortgage to ANZ National Bank Limited - 26.7.2006 at 9:00 am

Subject to a right (in gross) to drain water over part marked C on DP 456418 in favour of Christchurch City Council created by Easement Instrument 9192340.4 - 8.10.2012 at 3:58 pm

Identifier

CB47C/988

9456655.6 Surrender of the right of way, right to drain water and sewage and the right to convey water, electronic power and telephonic communications specified in Easement Certificate 5196643.3 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

[illegible]



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**



Identifier **CB47C/987**
Land Registration District **Canterbury**
Date Issued 19 April 2002

Prior References

CB39C/436

Estate	Fee Simple
Area	2.3200 hectares more or less
Legal Description	Lot 3 Deposited Plan 82392

Registered Owners

Janet Louise Scott

Interests

Appurtenant hereto is a right of way created by Transfer A167326.2 - 7.4.1995 at 11:25 am

The easement created by Transfer A167326.2 is subject to Section 243 (a) Resource Management Act 1991

Appurtenant hereto is a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

Subject to a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications over parts marked C, D, E, I, J and K on DP 82392 specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

The easements specified in Easement Certificate 5196643.3 are subject to Section 243 (a) Resource Management Act 1991

5535225.2 Surrender of the right of way as appurtenant to CT CB33K/471 specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5196643.4 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 19.4.2002 at 9:17 am

Subject to a right to drain sewage in gross over parts marked D and J on DP 82392 in favour of Christchurch City Council created by Transfer 5196643.5 - 19.4.2002 at 9:17 am

The easement created by Transfer 5196643.5 is subject to Section 243 (a) Resource Management Act 1991

Subject to a right to convey electric power in gross over parts marked R, K, J, I, C, D and E on DP 82392 in favour of Orion New Zealand Limited created by Transfer 5196643.6 - 19.4.2002 at 9:17 am

Land Covenant in Transfer 5196643.7 - 19.4.2002 at 9:17 am

5535225.3 Variation of the conditions of the easement specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

5535225.4 Variation of Covenant 5196643.7 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9:00 am

Subject to a right (in gross) to drain water over part marked B on DP 456418 in favour of Christchurch City Council created by Easement Instrument 9192340.3 - 8.10.2012 at 3:58 pm

9456655.6 Surrender of the right of way, right to drain water and sewage and the right to convey water, electronic power and telephonic communications specified in Easement Certificate 5196643.3 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

9456655.7 Surrender of the Land Covenant created by Transfer 5196643.7 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

Identifier

CB47C/987

10133261.1 Encumbrance to Christchurch City Council - 20.8.2015 at 12:29 pm

DIAGRAM IV
Not to Scale

DIAGRAM V
Not to Scale

DIAGRAM VI
Not to Scale

DIAGRAM VII
Not to Scale

EXISTING EASEMENTS

Feature	Special Treatment	Lot No.	Shown	Document
Right of Way	1	1	1	ADP 776/2
Right of Way	2	2	2	ADP 776/2
Right of Way	3	3	3	ADP 776/2
Right of Way	4	4	4	ADP 776/2
Right of Way	5	5	5	ADP 776/2
Right of Way	6	6	6	ADP 776/2
Right of Way	7	7	7	ADP 776/2
Right of Way	8	8	8	ADP 776/2
Right of Way	9	9	9	ADP 776/2
Right of Way	10	10	10	ADP 776/2
Right of Way	11	11	11	ADP 776/2
Right of Way	12	12	12	ADP 776/2
Right of Way	13	13	13	ADP 776/2
Right of Way	14	14	14	ADP 776/2
Right of Way	15	15	15	ADP 776/2
Right of Way	16	16	16	ADP 776/2
Right of Way	17	17	17	ADP 776/2
Right of Way	18	18	18	ADP 776/2
Right of Way	19	19	19	ADP 776/2
Right of Way	20	20	20	ADP 776/2
Right of Way	21	21	21	ADP 776/2
Right of Way	22	22	22	ADP 776/2
Right of Way	23	23	23	ADP 776/2
Right of Way	24	24	24	ADP 776/2
Right of Way	25	25	25	ADP 776/2
Right of Way	26	26	26	ADP 776/2
Right of Way	27	27	27	ADP 776/2
Right of Way	28	28	28	ADP 776/2
Right of Way	29	29	29	ADP 776/2
Right of Way	30	30	30	ADP 776/2
Right of Way	31	31	31	ADP 776/2
Right of Way	32	32	32	ADP 776/2
Right of Way	33	33	33	ADP 776/2
Right of Way	34	34	34	ADP 776/2
Right of Way	35	35	35	ADP 776/2
Right of Way	36	36	36	ADP 776/2
Right of Way	37	37	37	ADP 776/2
Right of Way	38	38	38	ADP 776/2
Right of Way	39	39	39	ADP 776/2
Right of Way	40	40	40	ADP 776/2
Right of Way	41	41	41	ADP 776/2
Right of Way	42	42	42	ADP 776/2
Right of Way	43	43	43	ADP 776/2
Right of Way	44	44	44	ADP 776/2
Right of Way	45	45	45	ADP 776/2
Right of Way	46	46	46	ADP 776/2
Right of Way	47	47	47	ADP 776/2
Right of Way	48	48	48	ADP 776/2
Right of Way	49	49	49	ADP 776/2
Right of Way	50	50	50	ADP 776/2
Right of Way	51	51	51	ADP 776/2
Right of Way	52	52	52	ADP 776/2
Right of Way	53	53	53	ADP 776/2
Right of Way	54	54	54	ADP 776/2
Right of Way	55	55	55	ADP 776/2
Right of Way	56	56	56	ADP 776/2
Right of Way	57	57	57	ADP 776/2
Right of Way	58	58	58	ADP 776/2
Right of Way	59	59	59	ADP 776/2
Right of Way	60	60	60	ADP 776/2
Right of Way	61	61	61	ADP 776/2
Right of Way	62	62	62	ADP 776/2
Right of Way	63	63	63	ADP 776/2
Right of Way	64	64	64	



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**



R. W. Muir
Registrar-General
of Land

Identifier **CB47C/986**
Land Registration District **Canterbury**
Date Issued 19 April 2002

Prior References

CB39C/436

Estate	Fee Simple
Area	2.1695 hectares more or less
Legal Description	Lot 2 Deposited Plan 82392

Registered Owners

Knights Stream Estates Limited

Interests

Subject to a right to convey electric power in gross over part marked O on DP 82392 in favour of Southpower Limited created by Transfer A152620.7 - 23.12.1994 at 11:31 am

Appurtenant hereto is a right of way created by Transfer A167326.2 - 7.4.1995 at 11:25 am

Subject to a right of way over part marked O on DP 82392 created by Transfer A167326.2 - 7.4.1995 at 11:25 am

The easements granted by Transfer A167326.2 are subject to Section 243(a) Resource Management Act 1991

Appurtenant hereto is a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

Subject to a right of way, right to drain water and sewage, right to convey water, electric power and telephonic communications over part marked F on DP 82392 specified in Easement Certificate 5196643.3 - 19.4.2002 at 9:17 am

The easements specified in Easement Certificate 5196643.3 are subject to Section 243 (a) Resource Management Act 1991

5535225.2 Surrender of the right of way as appurtenant to CT CB33K/471 specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9.00 am

5196643.4 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 19.4.2002 at 9:17 am

Subject to a right to convey electric power in gross over parts marked Q, P and F on DP 82392 in favour of Orion New Zealand Limited created by Transfer 5196643.6 - 19.4.2002 at 9:17 am

Land Covenant in Transfer 5196643.7 - 19.4.2002 at 9:17 am

5535225.3 Variation of the conditions of the easement specified in Easement Certificate 5196643.3 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9.00 am

5535225.4 Variation of Covenant 5196643.7 - Produced 28.3.2003 at 9:00 am and entered 13.5.2003 at 9.00 am

Subject to a right (in gross) to drain water over part marked A on DP 456418 in favour of Christchurch City Council created by Easement Instrument 9192340.2 - 8.10.2012 at 3:58 pm

9456655.6 Surrender of the right of way, right to drain water and sewage and the right to convey water, electronic power and telephonic communications specified in Easement Certificate 5196643.3 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

9456655.7 Surrender of the Land Covenant created by Transfer 5196643.7 as appurtenant to Lot 1 DP 82392 - 1.8.2013 at 4:53 pm

[illegible]