

From: Official Information
Sent: Wednesday, 18 April 2018 12:37 p.m.
To:
Subject: LGOIMA request - Water Bottling Plant
Attachments: Combined Resource Consent Files_Optimized.pdf; Interested Party Information Combined.pdf

Dear

Thank you for your email, received on 16 March 2018. You requested the following information, under the Local Government Official Information and Meetings Act 1987 (LGOIMA):

Under the LGOIMA legislation I am seeking the following information.

All emails and correspondence between Christchurch City Council and:

*Environment Canterbury
Cloud Ocean Water
Rapakī Natural Resources*

that relate to any consents in the Belfast area.

Refinement of request

On 19 March, you refined the scope of your request to the following:

Any information related to the proposed water bottling plant in Belfast and its related consents.

To clarify, this refinement altered the due date of the request to 18 April.

Release of information

Please find attached the following information:

1. Combined Resource Consent-related information
2. Information relating to Interested Party notification and Council submission to ECan

Withholding of information

The Council has decided to withhold some information under the following sections of the LGOIMA:

- 7(2)(a) – to protect the privacy of natural persons

In the Council's view the reasons for withholding these details are not outweighed by public interest considerations in section 7(1) favouring their release.

You have the right to request the Ombudsman to review this decision. Complaints can be sent by email to info@ombudsman.parliament.nz, by fax to (04) 471 2254, or by post to The Ombudsman, PO Box 10152, Wellington 6143.

Kind regards,

Sean Rainey
Senior Information Adviser and Privacy Officer
Office of the Chief Executive
Christchurch City Council
53 Hereford Street, Christchurch 8011
PO Box 73016, Christchurch 8154

From: O'Brien, Bridget
Sent: Wednesday, 19 July 2017 2:58 p.m.
To: Bourke, Mike;
Cc: Shelander, Diane; Potgieter, Zed; Moore, John
Subject: RE: CRC180265, Land Use Consent (s9), Cloud Ocean Water Limited, Lodgement of Resource Consent Application

Hi Nickie

As discussed, the Council opposes this consent application for a deeper bore at 20 Station Road. We are concerned that the stated purpose is for water bottling, yet there is no AEE or accompanying consent application for a water take consent.

It's not clear whether the applicant wishes to transfer its existing 50 L/s take consent (CRC1745895) for taking up to 50 L/s from bore M35/1294 at a depth of 33.1 m to this new, much deeper bore. If that is the case, we would be very concerned about potential impacts on our public water supply, as the flow rate is significant.

Kind regards
Bridget

Bridget O'Brien
Team Leader - Asset Planning - Water & Wastewater

Web: www.ccc.govt.nz
Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73014, Christchurch, 8154
Please consider the environment before printing this email

From: Bourke, Mike
Sent: Monday, 17 July 2017 2:08 p.m.
To:
Cc: Shelander, Diane <>> O'Brien, Bridget <>> ; Potgieter, Zed <>> ; Burrell, Greg <>>
Subject: RE: CRC180265, Land Use Consent (s9), Cloud Ocean Water Limited, Lodgement of Resource Consent Application

Hi Nickie
CCC will certainly take a keen interest in any subsequent application to take water from the proposed depth. The proposed bore is about 1 km from 2 key pumping stations (one in Darroch Street and one in Thompsons Road) so CCC will need to see the results of comprehensive well interference assessments on these CCC wells which are at similar depth.

We expect that given the depth there will unlikely be any stream depletion impacts even though the Kaputone Creek is very close but expect that this aspect will also be covered off in any proposed water take consent application.

Cheers
Mike

From: Shelander, Diane
Sent: Monday, 17 July 2017 8:58 a.m.
To: O'Brien, Bridget <>> Bourke, Mike <>> ; Potgieter, Zed <>>
Subject: FW: CRC180265, Land Use Consent (s9), Cloud Ocean Water Limited, Lodgement of Resource Consent Application

Hi,

Any issue with this consent application?

Cheers,

Diane

Diane Shelander, MPH MBEANZ

Senior Policy Analyst/Environmental Scientist
Strategy & Transformation Group

DDI
Fax
Email
Web

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73012, Christchurch, 8154

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Christchurch
City Council 

From: Nickie Pepper

Sent: Friday, 14 July 2017 11:49 a.m.

Subject: CRC180265, Land Use Consent (s9), Cloud Ocean Water Limited, Lodgement of Resource Consent Application

Tēnā koutou katoa

Lodgement of Resource Consent Application

Resource Consent Number: CRC180265

Applicant Name: Cloud Ocean Water Limited

CONSENT TYPE: Land Use Consent (s9)

CRC180265 to construct one bore for water bottling purposes at 20 Station Road, Belfast.

If you have any concerns with this proposal please respond by **21 Jul 2017** or contact us directly by this date so we can help assist you with the resource consent process.

If you require a copy of the application or would like to see where the proposal is located please use the link below (if the below link does not appear as a hyperlink just copy and paste it into your browser)

<https://www.ecan.govt.nz/data/consent-search/consentdetails/CRC180265>

Please note that our mapping services update our website every night so there may be a delay in loading the location map provided by Environment Canterbury. However, a detailed map may be included within the application document.

Thank you for helping us make Canterbury a great place to live.

Ngā mihi

Consent Planning Business Support Team

Nickie Pepper

Consents Assistant

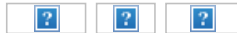
Environment Canterbury



PO Box345, Christchurch 8140

Customer Services: 0800 324636

Pollution Hotline: 0800 7655 88



*Facilitating sustainable
development in the
Canterbury region*

ecan.govt.nz

From: Shelander, Diane
Sent: Thursday, 7 December 2017 2:02 p.m.
To: 'Minal Lamghare'
Subject: RE: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application
Attachments: CCC submission Dec 2017 - CCRC182812 and CRC182813 groundwater takes - Cloud Ocean Water Ltd.doc

Hi Minai,

Attached is the Christchurch City Council submission on the consent application. Can we please ensure that the consent is not granted until City Council staff have had the opportunity to review and get advice on the results of well interference testing at the Thompsons and Belfast pump stations?

Cheers,

Diane

Diane Shelander, MPH MBEANZ

Senior Policy Analyst/Environmental Scientist
Strategy & Transformation Group

DDI

Web www.ccc.govt.nz

Christchurch City Council

Civic Offices, 53 Hereford Street, Christchurch
PO Box 73012, Christchurch, 8154

 Please consider the environment before printing this e-mail



From: Minal Lamghare [<mailto:>]
Sent: Monday, 4 December 2017 2:40 p.m.
Subject: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Tēnā koutou katoa

Lodgement of Resource Consent Application

Applicant Name: Cloud Ocean Water Limited

Resource Consent Number: CRC182812 to change condition in CRC175895 - to take groundwater at or about map reference M35:808-510 for industrial use at 20 Station Road, Belfast

Resource Consent Number: CRC182813 to take & use groundwater at 20 Station Road, Belfast

If you have any concerns with this proposal please respond by **11 Dec 2017** or contact us directly by this date so we can help assist you with the resource consent process.

If you require a copy of the application or would like to see where the proposal is located please use the link below (if the below link does not appear as a hyperlink just copy and paste it into your browser)

<https://www.ecan.govt.nz/data/consent-search/consentdetails/CRC182812>

<https://www.ecan.govt.nz/data/consent-search/consentdetails/CRC182813>

Please note that our mapping services update our website every night so there may be a delay in loading the location map provided by Environment Canterbury. However, a detailed map may be included within the application document.

Thank you for helping us make Canterbury a great place to live.

Ngā mihi
Consent Planning Business Support Team

Minal Lamghare
Consents Assistant - temp
Environment Canterbury



PO Box345, Christchurch 8140

Customer Services: 0800 324636

Pollution Hotline: 0800 7655 88



Submission of the Christchurch City Council on Resource Consent Applications CRC182812 and CRC182813

Applicant: Cloud Ocean Water Limited

Person Making the Submission: Christchurch City Council
PO Box 73012
Christchurch 8154
Attention: Diane Shelander
Phone: 03 941 8304
Email: diane.shelander@ccc.govt.nz

1. In July 2017 the applicant submitted a consent application (CRC180265) to construct a bore at 20 Station Road in Belfast. Christchurch City Council staff submitted two emails to Environment Canterbury raising concerns about that application, on 17 July and 19 July 2017.
2. City Council staff are aware that the new well has been sunk and is being 'surged' at present.

Impact on Christchurch public water supply

3. City Council staff are concerned that any new take from the new depth (currently testing at about 180m deep) may be from the same aquifer as our drinking water wells at Thompsons pump station (1.4 km distant) and Belfast (1.0 km distant) pump station.
4. As such it is critical that well interference testing is undertaken prior to any consent being granted for a new 'take' from the new well, even though this 'replaces' the take from the existing shallow well.
5. City Council staff consider that a consent to take water should not be granted until City Council staff have had the opportunity to review and get advice on the results of well interference testing at these two key City Council public water supply pumping sites.

From: Shelander, Diane
Sent: Thursday, 21 December 2017 6:16 a.m.
To: 'Carlo Botha'
Subject: RE: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Hi Carlo,

Mike Bourke has contacted me as follows, confirming what you have written:

This current application is only about the old bore - ie, to change the use of the water from this existing bore - which does not impact CCC. When the company seeks consent for the new bore then they will have to carry out well interference assessments and show that there is no significant impacts on our current well takes.

Thanks for your patience.

Kind regards,

Diane

Diane Shelander, MPH MBEANZ

Senior Policy Analyst/Environmental Scientist
Strategy & Transformation Group

DDI

Fax

Email

Web www.ccc.govt.nz

Christchurch City Council

Civic Offices, 53 Hereford Street, Christchurch
PO Box 73012, Christchurch, 8154

 Please consider the environment before printing this e-mail



From: Carlo Botha [

Sent: Wednesday, 20 December 2017 4:50 p.m.

To: Shelander, Diane

Subject: RE: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Hi Diane,

I spoke to Mike Burge at CCC earlier today in regards to my previous email to you below. He agreed that there has been some confusion with this application, as it relates to the existing bore (M35/1294) on site and not the new bore (BX24/1577).

I informed him that the applicant will have to apply for another consent in the future if they intend to take water from the new bore BX24/1577, as the resource consent CRC180265 that was granted on 1 August 2017 only authorised the installation of the bore and not the take and use of water from the bore.

Therefore, CCC is not considered to be affected by the current applications (CRC182812 & CRC182813) by Cloud Ocean Water Limited.

Can you please confirm this to me via email?

Kind regards,

Carlo

From: Carlo Botha

Sent: Wednesday, 20 December 2017 2:56 p.m.

To: 'Shelander, Diane' <

Subject: RE: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Hi Diane,

I am the Consents Planner who is processing the above application by Cloud Ocean Water Limited.

Thank you for sending through the Christchurch City Council's submission on the application. However, I can confirm that the application is **not** to take and use water abstracted from new bore BX24/1577 that was recently consented (CRC180265) to be installed at 20 Station Road, Belfast.

The applicant has only applied for a change of use application to allow water authorised to be taken and used under existing resource consent CRC175895 to be used for commercial water bottling. The existing resource consent CRC175895 authorises the applicant to take groundwater from existing bore M35/1294 at a rate not exceeding 50 litres per second with a volume not exceeding 4,320 cubic metres per day for industrial use. As part of the application, the applicant also seeks to include an annual volume of 1,576,800 cubic metres on the amalgamated consent, which was calculated based on the maximum daily rate of take of 4,320 cubic metres per day, 7 days a week.

Therefore, no well interference assessment is required to be provided with the application.

As such, I have not considered the Christchurch City Council to be affected by the proposal.

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

Kinds regards,
Carlo Botha

From: Shelander, Diane [
Sent: Thursday, 7 December 2017 2:02 p.m.
To: Minal Lamghare <
Subject: RE: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Hi Minai,

Attached is the Christchurch City Council submission on the consent application. Can we please ensure that the consent is not granted until City Council staff have had the opportunity to review and get advice on the results of well interference testing at the Thompsons and Belfast pump stations?

Cheers,

Diane

Diane Shelander, MPH MBEANZ

Senior Policy Analyst/Environmental Scientist
Strategy & Transformation Group

DDI

Web www.ccc.govt.nz

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73012, Christchurch, 8154

 Please consider the environment before printing this e-mail



From: Minal Lamghare
Sent: Monday, 4 December 2017 2:40 p.m.
Subject: CRC182812, CRC182813 - Cloud Ocean Water Limited - Water Permit - Lodgement of Resource Consent Application

Tēnā koutou katoa

Lodgement of Resource Consent Application

Applicant Name: Cloud Ocean Water Limited

Resource Consent Number: CRC182812 to change condition in CRC175895 - to take groundwater at or about map reference M35:808-510 for industrial use at 20 Station Road, Belfast

Resource Consent Number: CRC182813 to take & use groundwater at 20 Station Road, Belfast

If you have any concerns with this proposal please respond by **11 Dec 2017** or contact us directly by this date so we can help assist you with the resource consent process.

If you require a copy of the application or would like to see where the proposal is located please use the link below (if the below link does not appear as a hyperlink just copy and paste it into your browser)

<https://www.ecan.govt.nz/data/consent-search/consentdetails/CRC182812>

<https://www.ecan.govt.nz/data/consent-search/consentdetails/CRC182813>

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Thank you for helping us make Canterbury a great place to live.

Ngā mihi
Consent Planning Business Support Team

Minal Lamghare
Consents Assistant - temp
Environment Canterbury



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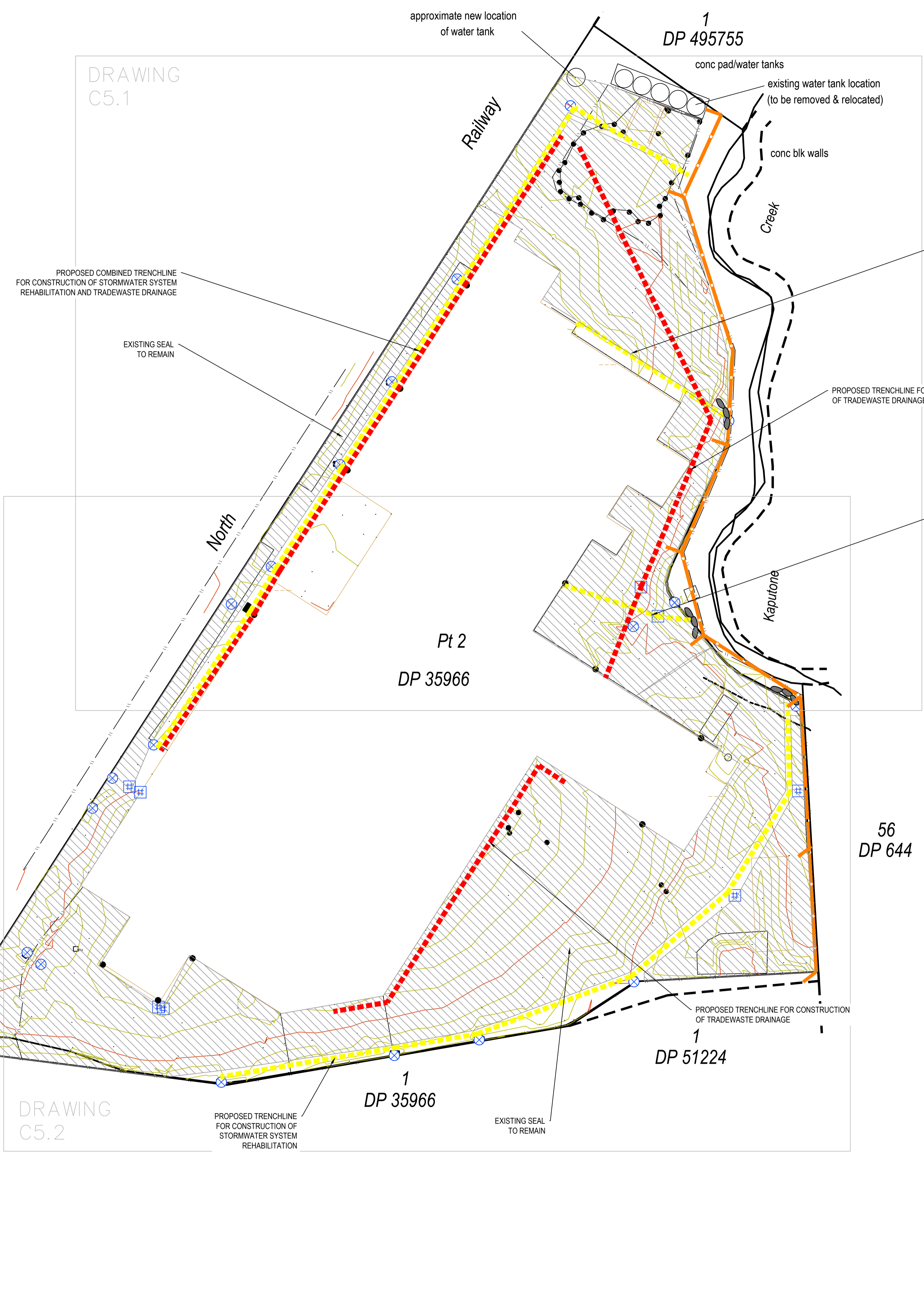
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Christchurch City Council

<http://www.ccc.govt.nz>



SEDIMENT & EROSION CONTROL NOTES
 THIS SEDIMENT CONTROL PLAN PROVIDES THE KEY DESIGN OUTLINE FOR THE SEDIMENT AND EROSION CONTROL MEASURES TO BE PROVIDED ON SITE. IT IS NOT POSSIBLE AT INITIAL DESIGN STAGE TO ANTICIPATE AND INCLUDE ALL SITE-SPECIFIC DESIGN DETAILS, AS SOME DETAIL CAN ONLY BE INCLUDED ON THE BASIS OF IN SITU MONITORING AND ADJUSTMENTS.
 IN ORDER TO BE EFFECTIVE ON SITE THE PLAN WILL NEED TO BE IMPLEMENTED BY A CONTRACTOR EXPERIENCED IN SEDIMENT AND EROSION CONTROL, WHO WILL BE REQUIRED TO MONITOR ITS PERFORMANCE AND MAKE SPECIFIC ADJUSTMENTS TO ITS DETAIL TO RESPOND TO SPECIFIC CONDITIONS ON SITE AND CHANGES TO THOSE CONDITIONS.
 IT IS NOT SUITABLE FOR UNMONITORED OR UNMANAGED IMPLEMENTATION OR IMPLEMENTATION BY PERSONNEL WHO LACK APPROPRIATE EXPERTISE AND EXPERIENCE IN EROSION AND SEDIMENT CONTROL. WE REQUIRE THAT THE SEDIMENT CONTROL PLAN BE MONITORED BY AN ON-SITE MANAGER OR CONTRACTOR APPROPRIATELY EXPERIENCED IN SEDIMENT AND EROSION CONTROL, WHO IS TO MAKE SUCH ADJUSTMENTS AS ARE NECESSARY TO ENSURE ITS EFFECTIVE OPERATION IN VIEW OF THE FEATURES, THE CONDITION OR STATE OF THE SITE OR CHANGES TO CONDITIONS ON SITE.
 ALL SEDIMENT MEASURES SHALL FOLLOW THE 2007 ENVIRONMENT CANTERBURY EROSION AND SEDIMENT CONTROL GUIDELINES.



NOTES:
 KIRK ROBERTS TAKES NO RESPONSIBILITY FOR THE SETOUT AND DIMENSIONS WHEN IT IS NOT DIMENSIONED ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND ALL OTHER PROJECT DOCUMENTATION, ANY DISCREPANCIES SHALL BE NOTIFIED PRIOR TO STARTING CONSTRUCTION
 CONTRACTOR TO VERIFY: ALL DRAWINGS ARE THE LATEST CONSTRUCTION ISSUE ALL DIMENSIONS PROVIDED ON SITE PRIOR TO COMMENCING ANY WORK

PROJECT
20 STATION ROAD
BELFAST

CLIENT
CLOUD OCEAN WATER LTD

TITLE
OVERALL SEDIMENT AND
EROSION CONTROL PLAN

REVIEWED BY RAB 21-03-2018

DESIGNED BY DL

DRAWN BY MP

SCALE 1:500@A1 JOB NO. 1710455

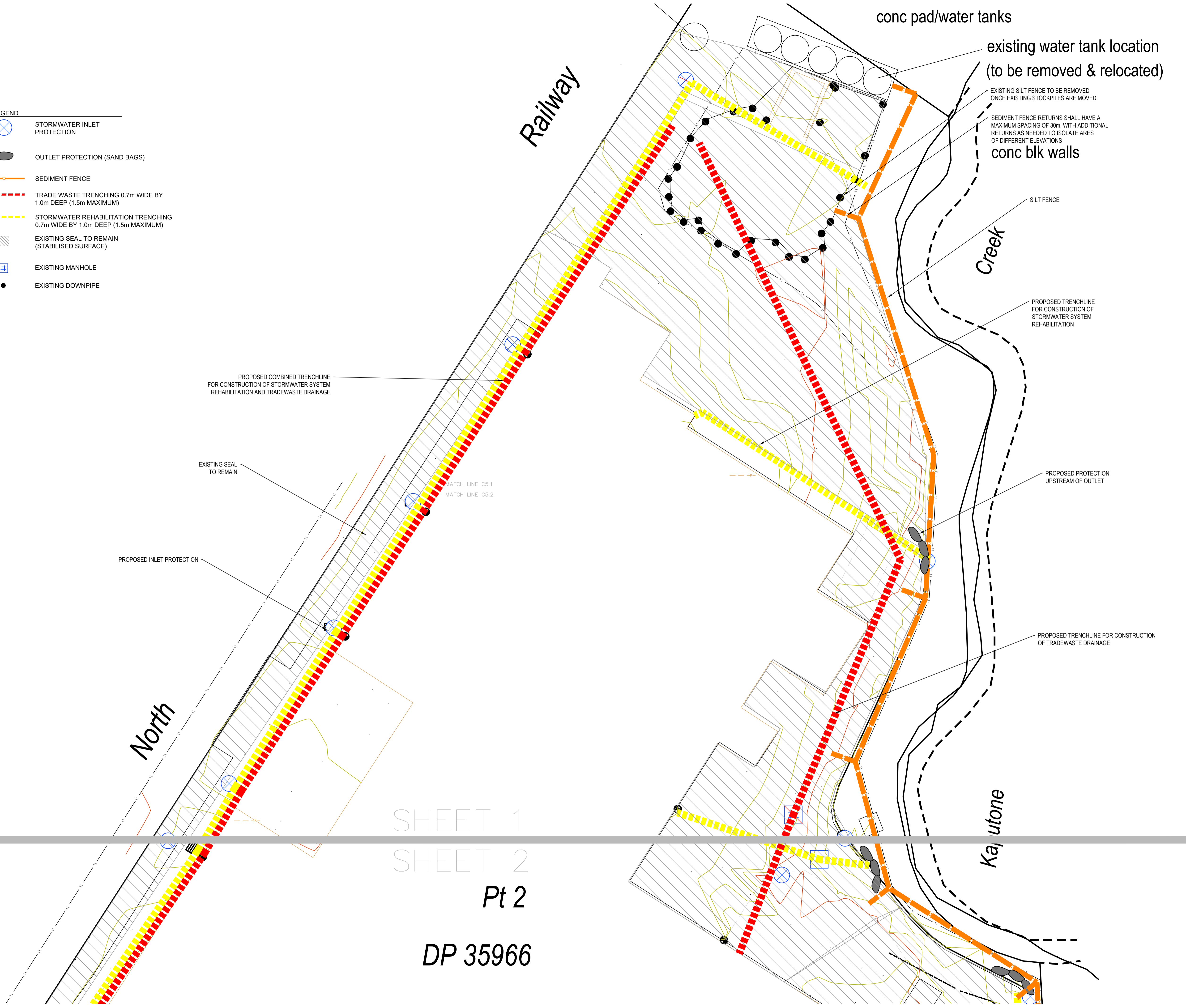
DRAWING NO. C5.0 REV. 1

FOR CONSENT





- LEGEND**
- STORMWATER INLET PROTECTION
 - OUTLET PROTECTION (SAND BAGS)
 - SEDIMENT FENCE
 - TRADE WASTE TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - STORMWATER REHABILITATION TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - EXISTING SEAL TO REMAIN (STABILISED SURFACE)
 - EXISTING MANHOLE
 - EXISTING DOWNPIPE



North

SHEET 1

SHEET 2

Pt 2

DP 35966

PROJECT
20 STATION ROAD
BELFAST

CLIENT
CLOUD OCEAN WATER LTD

TITLE
SEDIMENT & EROSION CONTROL
PLAN (SHEET 1 OF 2)

REVIEWED BY RAB 21-03-2018

DESIGNED BY DL

DRAWN BY MP

SCALE 1:250@A1 JOB NO. 1710455

DRAWING NO. REV.

C5.1 1

FOR CONSENT





NOTES:

KIRK ROBERTS TAKES NO RESPONSIBILITY FOR THE SETOUT AND DIMENSIONS WHEN IT IS NOT DIMENSIONED ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND ALL OTHER PROJECT DOCUMENTATION, ANY DISCREPANCIES SHALL BE NOTIFIED PRIOR TO STARTING CONSTRUCTION

CONTRACTOR TO VERIFY: ALL DRAWINGS ARE THE LATEST CONSTRUCTION ISSUE ALL DIMENSIONS PROVIDED ON SITE PRIOR TO COMMENCING ANY WORK

SHEET 1
SHEET 2

Pt 2

DP 35966

1
DP 35966

1
DP 51224

PROPOSED COMBINED TRENCHLINE FOR CONSTRUCTION OF STORMWATER SYSTEM REHABILITATION AND TRADEWASTE DRAINAGE

MATCH LINE C5.1
MATCH LINE C5.2

EXISTING SEAL TO REMAIN

PROPOSED TRENCHLINE FOR CONSTRUCTION OF STORMWATER SYSTEM REHABILITATION

SEDIMENT FENCE RETURNS SHALL HAVE A MAXIMUM SPACING OF 30m, WITH ADDITIONAL RETURNS AS NEEDED TO ISOLATE AREAS OF DIFFERENT ELEVATIONS

PROPOSED PROTECTION UPSTREAM OF OUTLET

SILT FENCE

PROPOSED TRENCHLINE FOR CONSTRUCTION OF TRADEWASTE DRAINAGE

PROPOSED INLET PROTECTION

- LEGEND**
- STORMWATER INLET PROTECTION
 - OUTLET PROTECTION (SAND BAGS)
 - SEDIMENT FENCE
 - TRADE WASTE TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - STORMWATER REHABILITATION TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - EXISTING SEAL TO REMAIN (STABILISED SURFACE)
 - EXISTING MANHOLE
 - EXISTING DOWNPIPE

PROJECT
20 STATION ROAD BELFAST

CLIENT
CLOUD OCEAN WATER LTD

TITLE
SEDIMENT & EROSION CONTROL PLAN (SHEET 2 OF 2)

REVIEWED BY RAB 21-03-2018

DESIGNED BY DL

DRAWN BY MP

SCALE 1:250@A1 JOB NO. 1710455

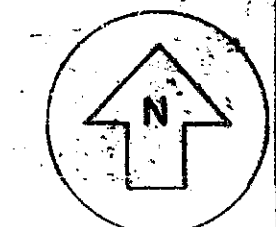
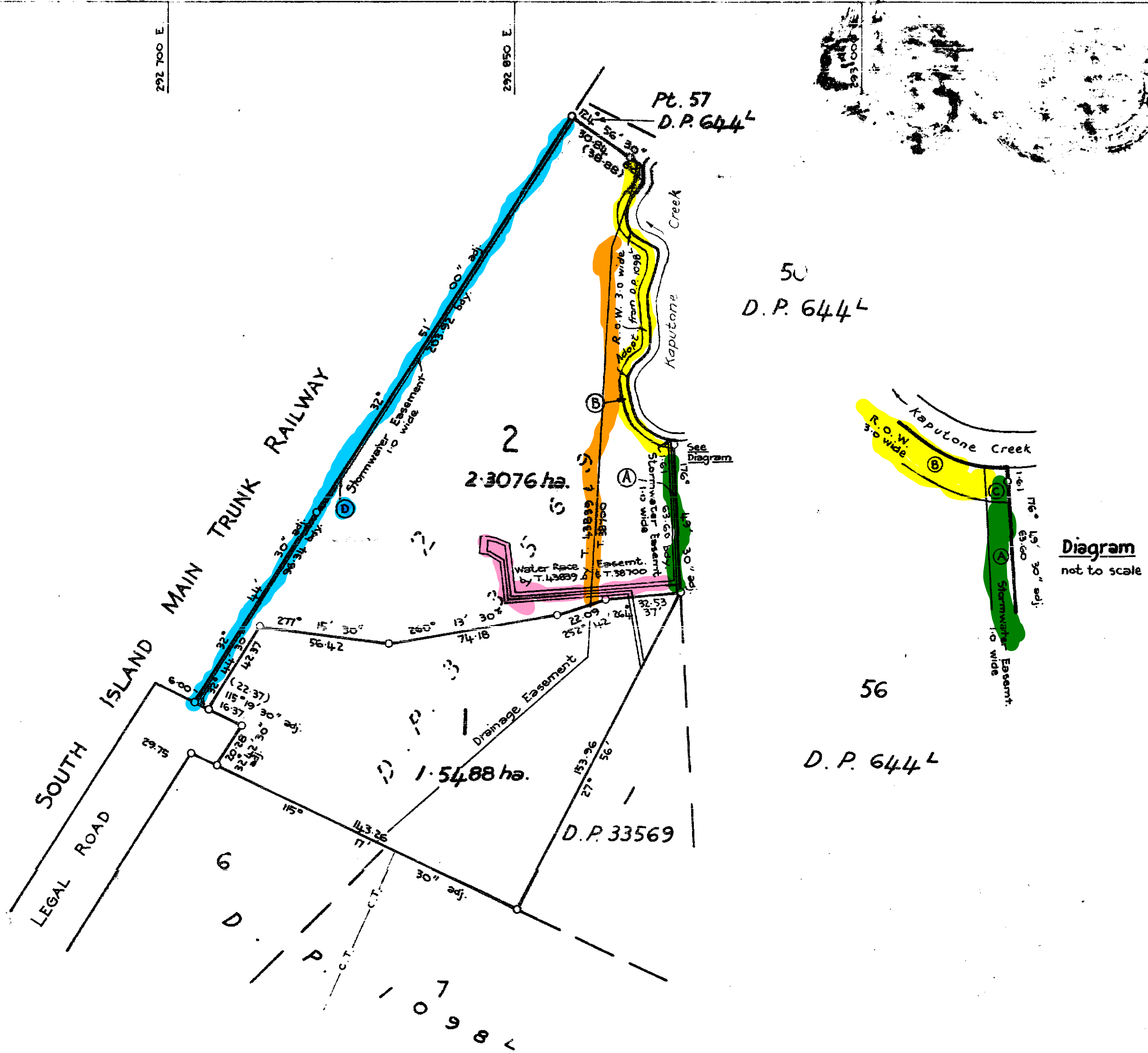
DRAWING NO. REV.

C5.2 1

FOR CONSENT



Cadd File: Z:\PROJ_2017\1710455-20 STATION ROAD\DELIVERY\06_DRAFT\CI\1710455_CIVIL_SITE_PLAN.DWG Pk Date: 3/22/2018 11:28:46 AM Name: Russell Brents Xref:



Approved
S. J. Tolson Director
Robert Hill County Clerk
 16 January 1975

The WAIMAIRI COUNTY COUNCIL, pursuant to Section 33 of the Town and Country Planning Act, 1953, certifies that the Subdivision shown hereon complies with the requirements and provisions of the operative District Scheme for the District as they stand at the time of this approval.

28.11.74
David
 County Clerk

In pursuance of the Provisions of Section 54 of "The Counties Amendment Act 1951," the Waimairi County Council hereby approves of the Plan of Subdivision shown hereon, conditional on the easements set out in the memorandum endorsed hereon being duly granted or reserved.

IN WITNESS WHEREOF the Common Seal of the Corporation of the County of Waimairi was hereto affixed this 18th day of NOVEMBER 1974, in the presence of
J. O. ...
 CHAIRMAN
...
 COUNTY CLERK

715 700 N.

Diagram not to scale

715 550 N.

Memorandum of Easements

Purpose	Shown	Serv. Ten.	Dom. Ten.
Right to drain Storm-water	A & C	Lot 2	Lot 1 Grantee
Right of Way	B & C	Lot 2	Christchurch Drainage Bd.
Right to drain Storm-water	D	Lot 2	Christchurch Drainage Bd.

Total Area 3.8564 ha.

Comprised in C.T. 14-B/858

I, Andrew Preston Todd of Christchurch Registered Surveyor and holder of an annual practising certificate hereby certify that this plan has been made from Surveys executed by me or under my direction, that both plan and Survey are correct and have been made in accordance with the regulations under the Surveyors Act 1966
 Dated at Christchurch this 14th day of January 1975 Signature *A.P. Todd*

Field Book p. Traverse Book p.

Reference Plans

Examined *...* Correct *...*

Approved as to Survey

... Chief Surveyor

Deposited this 16th day of April 1975

... District Land Registrar

DP 35966

Scale 1:1500 Date Oct. 1971

Instructions

LAND DISTRICT CANTERBURY
 SURVEY BLK & DIST. III CHRISTCHURCH
 SHEET NO. 5.76

347
 348
 Belefost
 Lots 1 & 2 being Subdivision of
 Lot 2 D.P. 33569

LOCAL AUTHORITY WAIMAIRI COUNTY
 Surveyed by David Lovell Smith & Partners
 Scale 1:1500 Date Oct. 1971



S.P. 1600

Kelly Andrew

From: Kelly Andrew
Sent: Friday, 2 March 2018 3:35 PM
To:
Cc: 'Amy Beran'
Subject: 20 Station Road - Council engagement with MKT on the applicants behalf - RMA/2018/337
Attachments: RE: RMA/2017/3173 For Processing - 20 Station Road_ NES comments; RMA/2017/3173 For Processing - 20 Station Road; FW: RMA/2018/337 For Processing - 20 Station Road

Good Afternoon,

We are processing, on behalf of the Christchurch City Council, a resource consent (partly retrospective) for earthworks and building within 10 metres of a waterway at 20 Station Road, Belfast. The proposal involves earthworks and building within the 10 metre Upstream Waterway setback pursuant to Rule 6.6.4.3 RD1 and RD3 of the Christchurch District Plan.

In their application, the applicant has directed that Council may undertake consultation on their behalf. Therefore, please find attached the relevant application material submitted to Council. Please review and provide comment accordingly. As some further background, initially an application was lodged for consent under the NES (also attached reference RMA/2017/3173). Subsequently a further consent was lodged for earthworks and earthworks and building within the waterway setback. We've had comments from Councils Environmental Health officer including recommended conditions (attached).

We are currently preparing a s92 request for information, I'm just waiting on comments from one more specialist. At this stage we are seeking further erosion and sediment control details as well as some clarification around landscape within/near the waterway associated with conditions of a previous consent found on file which we are looking into.

It may be good to discuss this further so please contact me when you've had a chance to go through this information. Please note we are seeking your input to consent RMA/2018/337 regarding earthworks and earthworks and building within waterway setback, as separate application RMA/2017/3173 is sought under the NES. However we note that both activities will not be considered in isolation.

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

**HARRISON
GRIERSON.
COM**



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



R. W. Muir
Registrar-General
of Land

Search Copy

Identifier CB32B/1231
Land Registration District Canterbury
Date Issued September

Prior References

C K/

Estate fee Simple
Area . hectares more or less
Legal Description Part Lot deposited Plan
Proprietors
Cloud Ocean ater Limited

Interests

. Easement Certificate specifying the following easements

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
rain water	Part Lot deposited Plan herein	Part herein	Lot deposited Plan CT C /	

The easements specified in Easement Certificate . are sub ect to Section () (a) Local Government ct

. Transfer creating the following easements in gross

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Right of way	Part Lot deposited Plan herein	P	The Christchurch rainage oard	
Right of way	Part Lot deposited Plan herein	C P	The Christchurch rainage oard	

The easements granted by Transfer . are sub ect to Section () (a) Local Government ct

. Transfer creating the following easements in gross

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
rain water	Part Lot deposited Plan herein	Part herein	The Christchurch rainage oard	

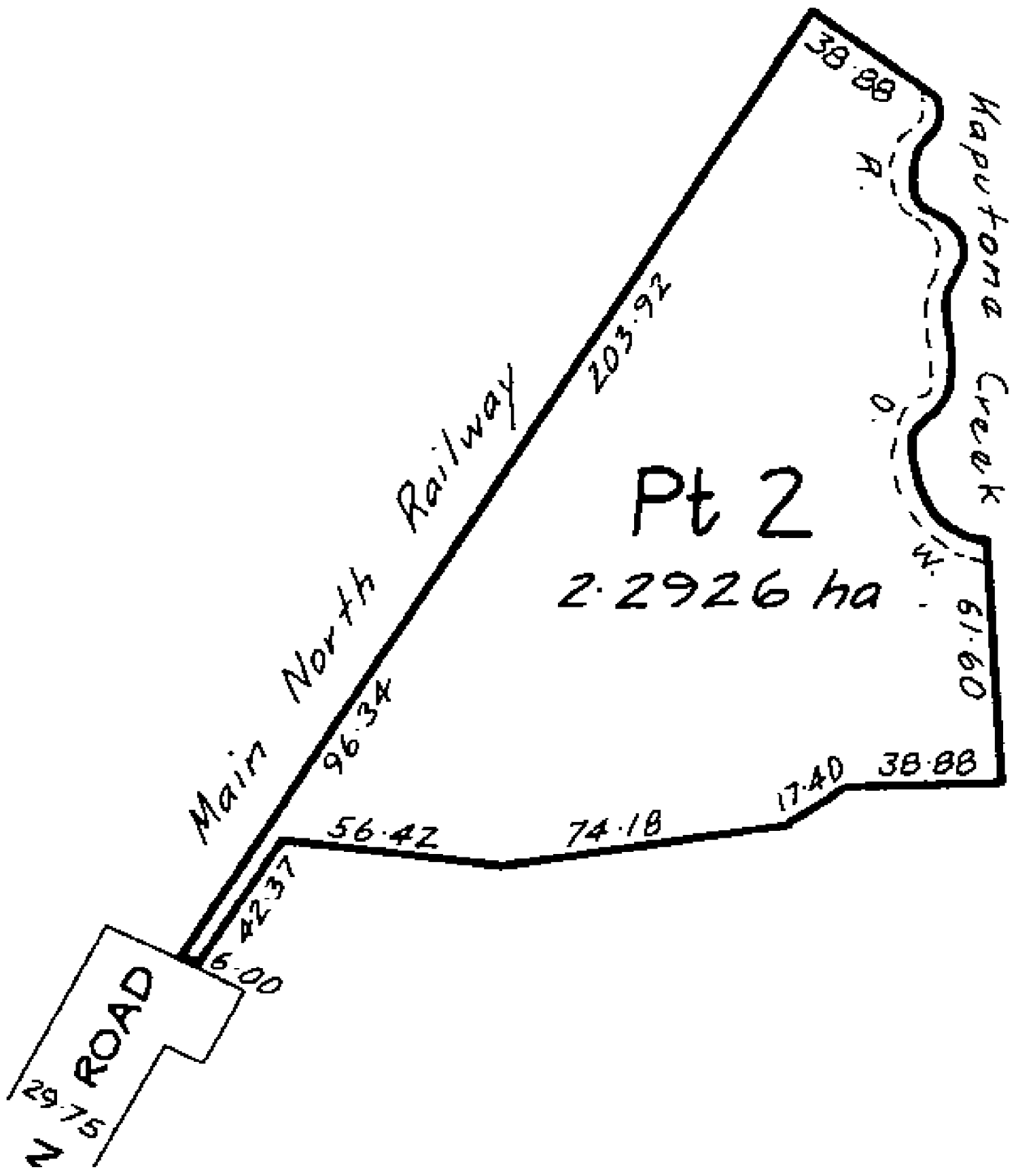
The easements granted by Transfer . are sub ect to Section () (a) Local Government ct

- Sub ect to water race easements created by Transfer
- Sub ect to drainage easements created by Transfer
- Sub ect to water race easements created by Transfer
- Sub ect to drainage easements created by Transfer

ppurtenant hereto is a right to drain sewage created by Easement Instrument . . . at : pm

. Encumbrance to Cavalier ool Holdings Limited . . . at : pm

. C E T ORION NE E L N LIMITE . . . at : pm





Instrument No. 10664720.1
 Status Registered
 Date & Time Lodged 19 Dec 2016 16:38
 Lodged By Chen, Jan Shu Jing
 Instrument Type Encumbrance

**Affected Computer Registers Land District**

CB32B/1231

Canterbury

Annexure Schedule: Contains 7 Pages.**Encumbrancer Certifications**

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

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

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

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

Signature

Signed by Jan Shu Jing Chen as Encumbrancer Representative on 19/12/2016 02:02 PM

Encumbrancee Certifications

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

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

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

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

Signature

Signed by Jan Shu Jing Chen as Encumbrancee Representative on 19/12/2016 02:02 PM

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

Form E

Encumbrance instrument

(Section 101 Land Transfer Act 1952)

Affected instrument Identifier All/part Area/Description of part or stratum and type (if applicable)

CB32B/1231	All	Part Lot 2 DP 35966
------------	-----	---------------------

Encumbrancer

Kaputone Wool Scour (1994) Limited

Encumbrancee

Cavalier Wool Holdings Limited

Estate or interest to be encumbered *Insert e.g. Fee simple; Leasehold in Lease No. etc.*

Fee Simple

Encumbrance Memorandum Number

N/A

Nature of security *State whether sum of money, annuity or rentcharge and amount*

Rent charge of \$10.00 per annum (if demanded)

Encumbrance *Delete words in [], as appropriate*

The Encumbrancer encumbers for the benefit of the Encumbrancee the land in the above computer register(s) with the above sum of money, annuity or rentcharge, to be raised and paid in accordance with the terms set out in the Annexure Schedule(s) and so as to incorporate in this Encumbrance the terms and other provisions set out in the Annexure Schedule(s) for the better securing to the Encumbrancee the payment(s) secured by this Encumbrance, and compliance by the Encumbrancer with the terms of this encumbrance.

Form E *continued***Terms**

1	Length of term	50 years from the date of registration of this encumbrance instrument.
2	Payment date(s)	Refer to Annexure Schedule.
3	Rate(s) of interest	Refer to Annexure Schedule.
4	Event(s) in which the sum, annuity or rentcharge becomes payable	Refer to Annexure Schedule.
5	Event(s) in which the sum, annuity or rentcharge ceases to be payable	Refer to Annexure Schedule.

Covenants and conditions*Continue in Annexure Schedule(s), if required*

Refer to Annexure Schedule

Modification of statutory provisions*Continue in Annexure Schedule(s), if required*

Refer to Annexure Schedule

Form E *continued*

Annexure Schedule 1

Encumbrance Instrument

BACKGROUND

- A. The Encumbrancer is registered as proprietor of the Land.
- B. A related party of the Encumbrancer has sold certain assets to the Encumbrancee.
- C. The Encumbrancee agreed to purchase those assets on the condition that the Encumbrancer enters into and registers this encumbrance instrument against the certificate of title(s) for the Land for the benefit of the Encumbrancee.

1. INTERPRETATION

In this encumbrance instrument unless the context indicates otherwise:

1.1 Definitions:

- (a) **Bill Rate** means the rate per annum as quoted on Reuters page BKBM (or any successor page displaying substantially the same information) under the heading FRA for bank accepted bills having a term of 90 days as fixed at 10:45am on the relevant date;
- (a) **Covenants** means the covenants contained in the First Schedule of this encumbrance instrument;
- (b) **Encumbrancee** means the Encumbrancee named on the first page of this encumbrance together with its successors and assigns;
- (c) **Encumbrancer** means the Encumbrancer named on the first page of this encumbrance instrument and includes the person for the time being registered as proprietor of the Land and any person claiming under the Encumbrancer but only for as long as that person is registered proprietor of the Land;
- (d) **Land** means the fee simple estate in the land comprised and described in computer freehold register identifier CB32B/1231 (Canterbury Registry); and
- (e) **Payment Date** means such date or dates upon which the Rent Charge becomes payable in accordance with clause 4 of this encumbrance instrument;
- (f) **Rate of Interest** means the Bill Rate on the relevant Payment Date plus a margin of 3% per annum;
- (g) **Rent Charge** means the annual rent charge of \$10.00 per annum payable in accordance with clause 4 of this Encumbrance;
- (h) **scouring** means the scouring of wool or any other products.

1.2 Defined Expressions

expressions defined in the main body of this encumbrance instrument have the defined meaning in the whole of this encumbrance instrument including the Background and any schedules;

1.3 Headings

section, clause and other headings are for ease of reference only and do not affect this encumbrance instrument's interpretation;

1.4 Negative Obligations

any obligation not to do anything includes an obligation not to suffer, permit or cause that thing to be done;

1.5 Persons

references to persons include references to individuals, companies, corporations, partnerships, firms, joint ventures, associations, trusts, organisations, governmental or other regulatory bodies or authorities or other entities in each case whether or not having separate legal personality;

1.6 Plural and Singular

words importing the singular number include the plural and vice versa;

1.7 Schedule

the schedule to this encumbrance instrument and the provisions and conditions contained in that schedule will have the same effect as if set out in the body of this encumbrance instrument;

1.8 Sections, Clauses and Schedules

references to sections, clauses and schedules are references to this encumbrance instrument's sections, clauses and schedules; and

1.9 Statutes and Regulations

references to any statutory provision includes any statutory provision which amends or replaces it, and any subordinate legislation made under it.

2. INTENTION OF ENCUMBRANCE

The intention of this encumbrance instrument is to secure the ongoing performance by the Encumbrancer of the Covenants and the payment of the Rent Charge. The Encumbrancee is only required to provide a release of this encumbrance instrument in the circumstances described in clause 8.

3. COVENANTS

The Encumbrancer covenants with the Encumbrancee to observe and perform the Covenants.

4. RENT CHARGE

The Encumbrancer hereby encumbers the Land for the benefit of the Encumbrancee with the Rent Charge payable in one sum per annum on the anniversary of the date of this encumbrance instrument (in each case if demanded by the Encumbrancee). The parties agree that:

- (a) The Rent Charge shall only be payable by the Encumbrancer following demand of the same being made by the Encumbrancee in accordance with the terms of this encumbrance instrument ; and
- (b) Under no circumstances whatsoever shall the Rent Charge for the relevant year or any future year be paid in advance.

5. INTEREST

The Encumbrancer agrees to pay interest to the Encumbrancee at the Rate of Interest on the amount of the Rent Charge that is not paid in full on the Payment Date. Interest shall commence from the Payment Date and shall continue to accrue on such unpaid amount until the Rent Charge payable under this encumbrance instrument is fully paid.

6. COSTS

The Encumbrancer shall pay all costs directly or indirectly attributable to enforcement and discharge of this encumbrance instrument and any documents associated with it.

7. CHARGE

This encumbrance instrument shall be registered as a charge in respect of the Land.

8. DISCHARGE / DISPENSATION

- (a) The Encumbrancer shall be entitled to a discharge of this encumbrance instrument at the request and cost of the Encumbrancer on the expiry of the term of this encumbrance instrument (being 50 years from the date of registration of this encumbrance instrument) and any monies that become owing under this encumbrance instrument are fully paid.
- (b) Additionally, the Encumbrancee at its sole and entire discretion may:
 - (i) grant dispensation to the Encumbrancer on such terms and conditions as the Encumbrancee sees fit to undertake an activity which would otherwise be a breach of the Covenants; or
 - (ii) provide a discharge of this encumbrance instrument notwithstanding the term of this encumbrance instrument has not expired.

9. BREACH

Without prejudice to any other right or remedy that may arise at common law or otherwise it is acknowledged that in the event that there is a breach of this encumbrance instrument by the Encumbrancer that the Encumbrancee shall be entitled to pursue the Encumbrancer for damages and/or injunctive relief.

10. BINDING NATURE

For the avoidance of doubt, it is the intention of the Encumbrancer and the Encumbrancee that (subject to expiry of the term of this encumbrance instrument) the Covenants in this

encumbrance instrument will bind the Encumbrancer and future registered proprietors of the Land for the benefit of the Encumbrancee.

11. DELAYS

Any delay by the Encumbrancee in enforcing any rights or remedies in terms of this encumbrance instrument shall not in any circumstances be deemed to be a waiver of such right or remedy.

12. SEVERANCE

If any provision of this encumbrance instrument is or becomes illegal, invalid or unenforceable in any respect, that provision shall be read down to the extent necessary to make it legal, valid and enforceable or, if it cannot be read down, deemed severed from this encumbrance instrument. Such change shall not affect the legality, validity and enforceability of the other provisions of this encumbrance instrument.

13. ENCUMBRANCEE CONSENT

The Encumbrancee's consent shall not be required to:

- (a) the disposal of the Land; or
- (b) the registration of any instrument against the computer freehold register for the Land which has priority behind this instrument.

14. IMPLIED TERMS

Sections 203, 205, 289, 290 and 302 of the Property Law Act 2007 apply to this Encumbrance, but otherwise (and without prejudice to the Encumbrancee's rights of action at common law as a rent charger or encumbrancee and without waiving the Encumbrancee's rights under the Land Transfer Act 1952 and the Property Law Act 2007):

- (a) the Encumbrancee shall be entitled to none of the powers and remedies given to mortgagees by the Land Transfer Act 1952 and the Property Law Act 2007; and
- (b) no covenants on the part of the Encumbrancer and their successors in title are implied in this Encumbrance other than the covenants for further assurance implied by section 154 of the Land Transfer Act 1952.

15. CONTRACTS PRIVITY

The Encumbrancer acknowledges that the provisions of this encumbrance instrument are intended to confer benefits on the Encumbrancee and/or any subsidiary or related companies (as defined in the Companies Act 1993) whether that subsidiary or related company became such before or after the date of this encumbrance instrument and to create obligations on the part of the Encumbrancer which are enforceable at the suit of any of those companies whether by way of defence or otherwise pursuant to the provisions of the Contracts Privity Act 1982.

FIRST SCHEDULE

Covenants of Encumbrancer

The Encumbrancer covenants with the Encumbrancee that it will not, and nor will it allow any other party at any time to, undertake or cause to be undertaken any activity on the Land (or any part or parts thereof) which involves scouring, or sell the Land or part or parts thereof to any party in the knowledge having made reasonable enquiries that such party intends to establish and undertake an activity on the Land which involves scouring.

FUTURE EARTHWORKS PLAN.

08/02/2018.

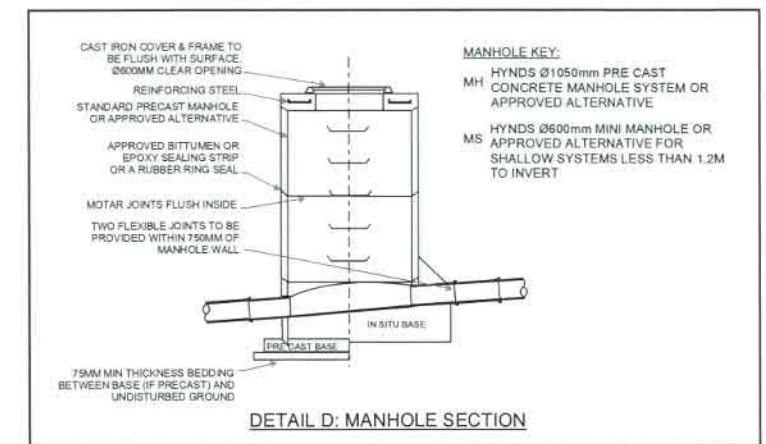
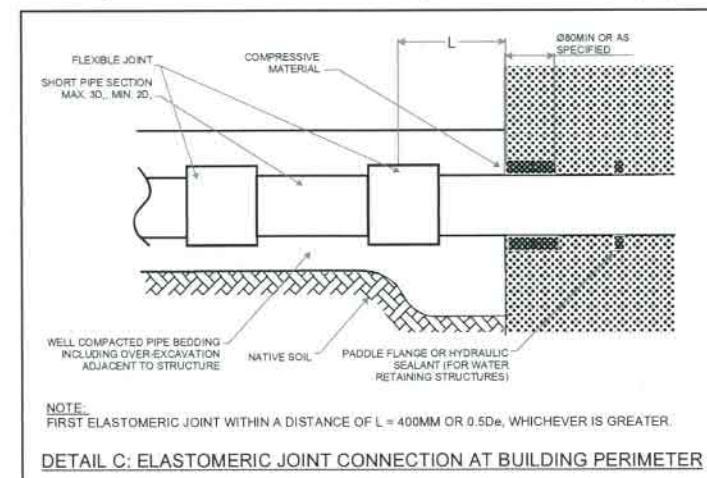
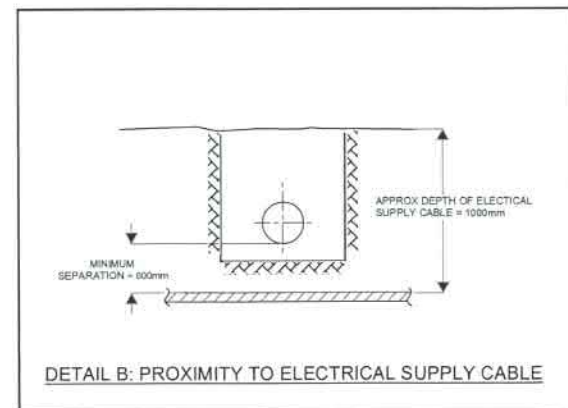
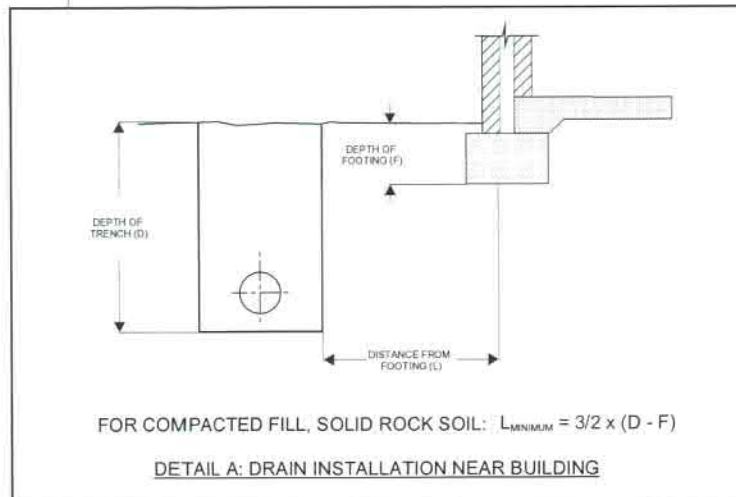
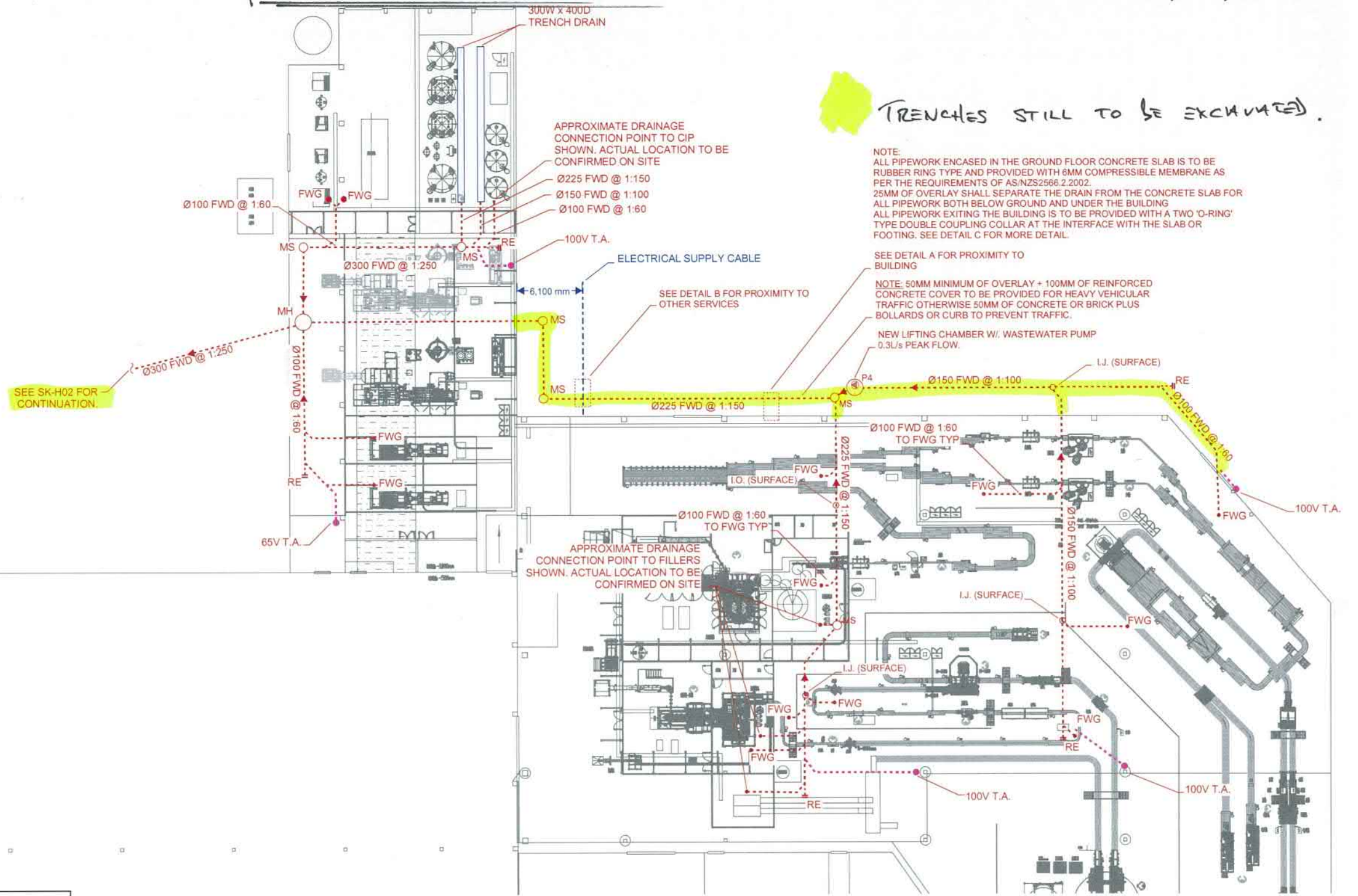
E	REVISED CONSENT	13/12/2017
	AMENDMENT	

CHECK ALL INFORMATION ON SITE PRIOR TO COMMENCING WORK. READ IN CONJUNCTION WITH THE SPECIFICATION AND OTHER RELEVANT DRAWINGS AND DOCUMENTS



First Floor, 96 Teate St, PO Box 842
Christchurch, New Zealand. Ph. (03) 977 8800
Email: admin@cosgroves.com

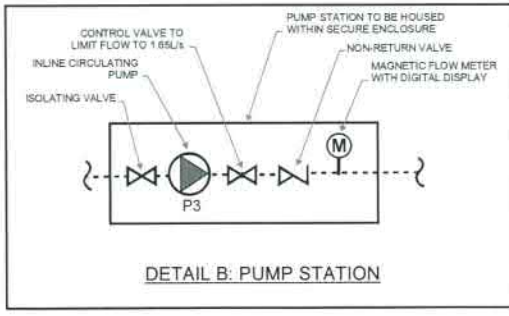
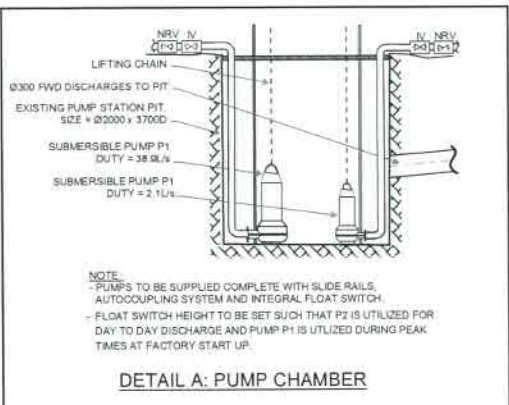
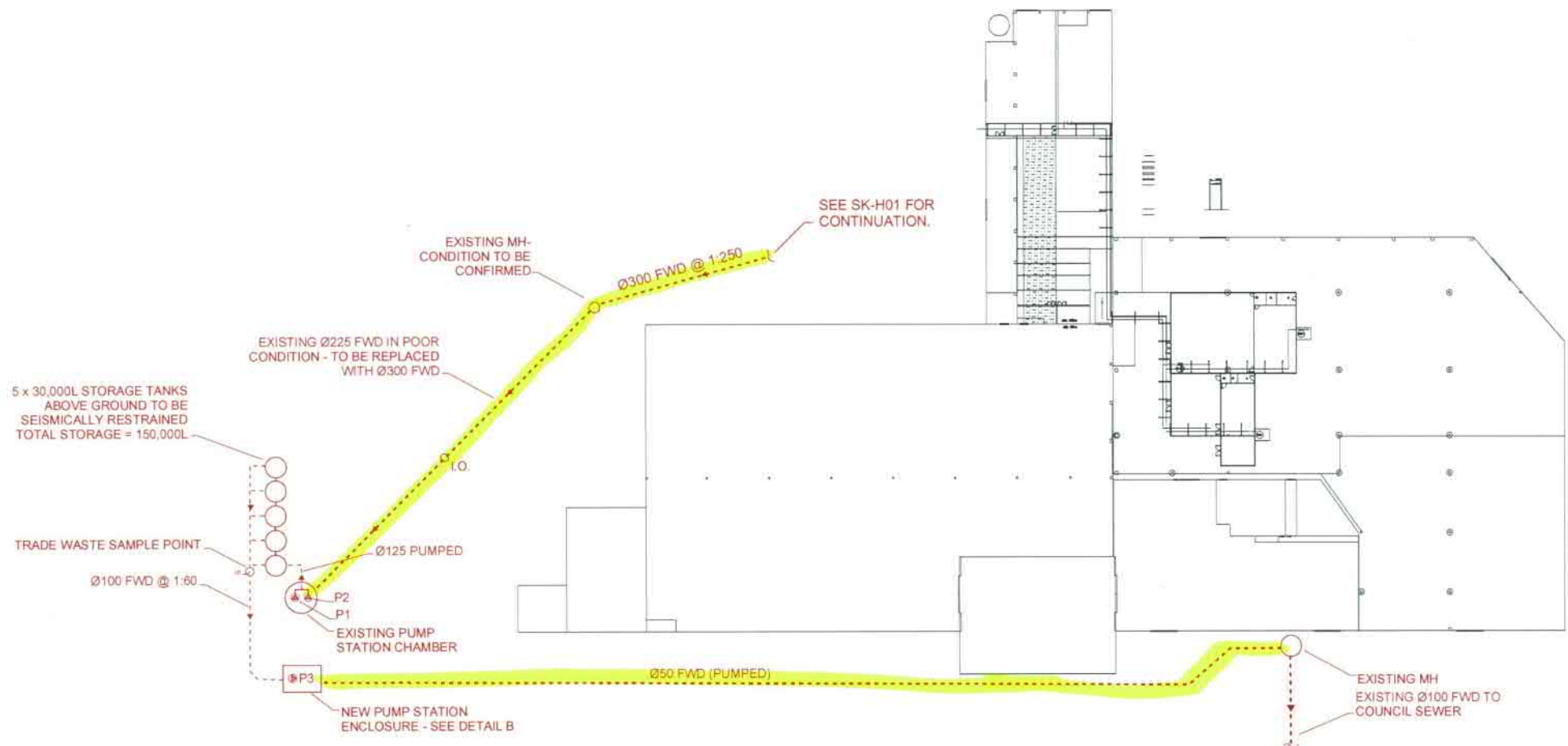
PROJECT:		
CLOUD OCEAN WATER BOTTLING PLANT		
SHEET TITLE:		
SANITARY SERVICES		
REVISED CONSENT		
DESIGNED BY	DATE	SCALE
SH	2/11/17	
DRAWN BY	SCALE	
SH	NTS	E
SHEET No:		
CC17182-SK-H01		



E	REVISED CONSENT	13/12/2017
CHECK ALL INFORMATION ON SITE PRIOR TO COMMENCING WORK. READ IN CONJUNCTION WITH THE SPECIFICATION AND OTHER RELEVANT DRAWINGS AND DOCUMENTS		



PROJECT: CLOUD OCEAN WATER BOTTLING PLANT
SHEET TITLE: SANITARY SERVICES
REVISED CONSENT
DESIGNED BY: SH DATE: 2/11/17 ISSUE: E
DRAWN BY: SH SCALE: NTS
SHEET No: CC17182-SK-H02

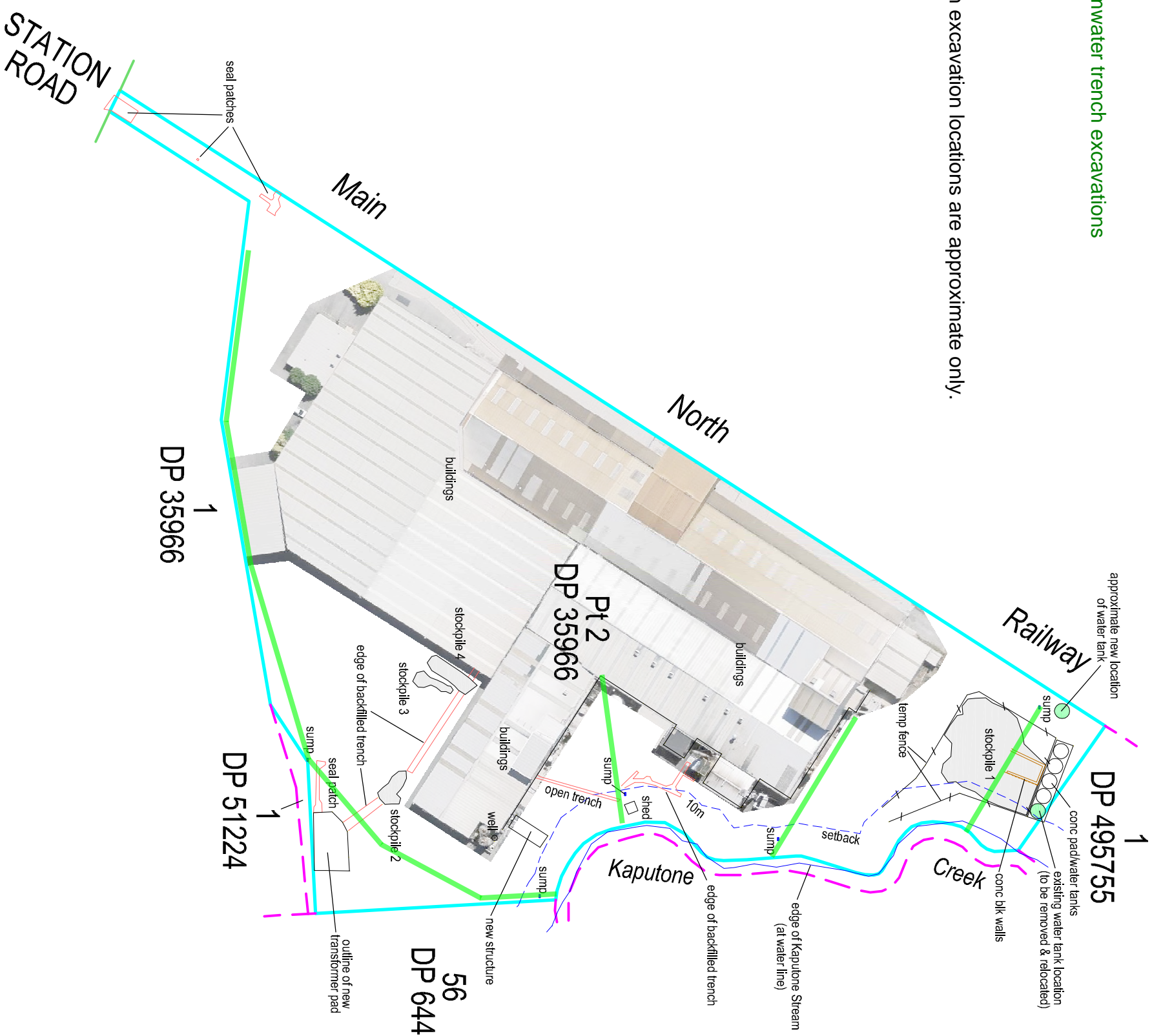
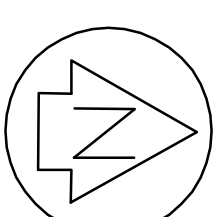


LEGEND:

Proposed stormwater trench excavations

NOTES

1) Stormwater trench excavation locations are approximate only.



NOTES:

1. THIS SURVEY HAS NOT INCLUDED SITE MARKING OF THE BOUNDARY POSITIONS UNLESS OTHERWISE INDICATED.
2. NO UNDERGROUND SERVICE INFORMATION IS SHOWN ON THIS PLAN. THE LOCATION OF ANY SUCH SERVICES SHOULD BE CONFIRMED WITH THE RELEVANT LOCAL AUTHORITY OR UTILITY SERVICE PROVIDER.

STOCKPILE VOLUMES

- STOCKPILE 1 = 310m³
- STOCKPILE 2 = 8m³
- STOCKPILE 3 = 6m³
- STOCKPILE 4 = 26m³

N.B. Stockpile volumes noted here do not account for a reduction factor for bulking.

SURVYUS
CONSULTANTS
surveying engineering property development

4 Meadow Street, PO Box 5558, Papanui, Christchurch
P 03 352 5599
F 03 352 5527
TOLL FREE 0508 787 887

AMBERLEY 03 314 9200
ASHBURNTON 03 307 7021
DUNFIELD 03 318 8151

REV	DATE	REVISION DETAILS
A	30/07/18	SITE SURVEY

DRAFTED	VERIFIED
SRS	
DATE	

PROJECT	TITLE
KIRK ROBERTS - 20 STATION ROAD, BELFAST	SITE SURVEY
SHEET 1 OF 1	

PROJECT NO	SCALE	SIZE
13736	1 : 1250 (A3)	A3
DRAWING NO	REV	
SS-01		A

From: Kelly Andrew <
Sent: Monday, 26 March 2018 12:53 p.m.
To: Braddick, Laura
Subject: FW: 20 Station Road - Sediment and Erosion Control Plan



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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GRIERSON.
COM**

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From: Kim Seaton - Novo Group [
Sent: Friday, 23 March 2018 3:45 PM
To: McDonald, Yvonne < >; Kelly Andrew < >
Subject: RE: 20 Station Road - Sediment and Erosion Control Plan

Hi Yvonne
Until the last couple of days we understood the ESCP would be needed to respond to an RFI. (we also needed it to attach to the ECan earthworks consent). Since we already had the plan well advanced when Kelly indicated it would be a condition of consent instead, we lodged the plan anyway. So I would say that it is for information purposes now, and when the consents are issued, it can be taken to fulfil the consent conditions.

Does that sound ok from your perspective?

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: McDonald, Yvonne
Sent: Friday, 23 March 2018 3:18 PM
To: Kim Seaton - Novo Group < >; 'Kelly Andrew' < >
Subject: RE: 20 Station Road - Sediment and Erosion Control Plan

Kim,
Are you submitting this for acceptance under either proposed RMA/2017/3173 condition 3 or proposed RMA/2018/337 condition 1 or both, in anticipation of issued consents and to fulfil the relevant conditions?
Or just for information?

Yvonne McDonald

Senior Subdivisions Engineer
CC-Planning Team 1, CC-Resource Consents Unit

DDIFax

From: Kim Seaton - Novo Group [
Sent: Thursday, 22 March 2018 2:32 p.m.
To: Kelly Andrew <k
Cc: McDonald, Yvonne

Subject: FW: 20 Station Road - Sediment and Erosion Control Plan

Hi Kelly
As promised, attached is the sediment and erosion control plan for Cloud Ocean Water.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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Christchurch City Council
<http://www.ccc.govt.nz>

From: Kelly Andrew
Sent: Monday, 26 March 2018 12:58 p.m.
To: Braddick, Laura
Subject: FW: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Confirmation of scope as at / .



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [
Sent: Thursday, 22 March 2018 10:13 AM
To: Kelly Andrew
Cc: McDonald, Yvonne ; 'Hannah.Mirabueno@ccc.govt.nz' ; Askew, Kate
Tredinnick, Emily
Subject: RE: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Hi Kelly

That's generally correct. We apologise for the uncertainty – as more surveying is done of the site, more damage or trade waste requirements come to light that require earthworks, hence the changing scope. Kirk Roberts received some further survey information yesterday that confirmed that in places the stormwater trenches may require excavation to as deep as 1.5m (though mostly only to 1m), and as I confirmed just before, there is a manhole inside the building that is 1.5m in depth. Nevertheless, all of that fits within the parameters of what we originally applied for, which is a maximum depth of 1.5m excavation, and within the volumes we have already applied for.

In terms of works to be undertaken, to clarify, you will note on the "future earthworks" plan included in the application documents (p25, a Cosgroves plan) that there is also a trench down the western side of the building that is yet to be dug. That will be a trade waste pipe trench that will likely also include stormwater pipes. In any case the trench will not exceed 1.5m in depth and the volumes for that excavation are included in our estimates.

A sediment and erosion control plan has been prepared and will be provided to you today. The ECan earthworks consent is to be lodged today, leaving the stormwater discharge consent to still be lodged with ECan. The applicant already has consent from ECan for a new bore and that work has been undertaken. The District Plan exempts those bore works from consideration.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew
Sent: Thursday, 22 March 2018 9:40 AM
To: Kim Seaton - Novo Group <
Cc: McDonald, Yvonne <Y> ; 'Hannah.Mirabueno@ccc.govt.nz' <
< >; Tredinnick, Emily <
Subject: RE: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Good Morning Kim,

I just want to make sure we have the scope of this proposal and consent clearly understood.

The attached plan shows the existing stockpiles on site which have been there for a while now. The material includes that from the excavation/tranches from two of the four stormwater drains which require repair on site. The volume of this material is as follows:

The applicant also seeks to undertake additional earthworks (not undertaken yet) involving: approximately 75 m³ of additional earthworks in total, approximately 15 m³ of which will be located within 10m of the Kaputone Creek. A maximum depth of 1m is assumed for the trenches. These works are to undertake the repairs for the remaining two of four stormwater drains.

No further earthworks under the district plan are proposed. All run off from stockpiles and the site are currently being managed through ESCs which have not been detailed on the site plan. Councils engineer has indicated that consent conditions will require this detail to be provided to Council. I am currently waiting to confirm this with Councils engineer. Councils waterways expert has also indicated that planting in accordance with that previously approved and required to remain in situ be retained and reinstated where required. You have noted that the applicant has a willingness to do whatever planting is needed. Similarly it is indicated at this stage that a condition may be appropriate.

Stormwater discharge is not accepted under CCCs global stormwater discharge consent. You have sought advice from ECan to obtain stormwater and other relevant consents from ECan where required. We are aware this may include consent for a bore. The scope of any earthworks associated with this is not included in the applications currently being considered by CCC (RM / / / and RM / / /).

Can you please confirm whether this summary is accurate

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

D



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From: Kim Seaton - Novo Group
Sent: Thursday, 15 March 2018 4:58 PM
To: Kelly Andrew < >
Cc: McDonald, Yvonne < >; 'Hannah.Mirabueno@ccc.govt.nz'
Subject: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Hi Kelly
As previously discussed, Kirk Roberts have recently discovered that there are two additional existing stormwater drains that will require repairing on site. The drains are earthquake damaged, but appear not to have been repaired by the previous site owners. We wish to amend the two resource consent applications currently with you, to allow for those additional earthworks. Attached is the site plan, that shows the location of all four stormwater drains on site. The two northernmost drains are the ones that we now need to include in the application. The other two are already included, as per Appendix 2 of RMA2018337 (Cosgroves Plan).

Kirk Roberts advise that the earthworks required will be as follows:
- Approximately 75m³ of additional earthworks in total, approximately 15m³ of which will be located within 10m of the Kaputone Creek. A maximum depth of 1m is assumed for the trenches.

We note that previously we discussed including a large concrete pad in the application, but given the design and location of the pad is not yet finalised, we have decided that the pad will be best dealt with under a separate resource consent.

If you need any clarification of the above, please don't hesitate to contact me.

regards
Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew
Sent: Monday, 26 March 2018 12:56 p.m.
To: Braddick, Laura
Subject: FW: RMA/2018/337 - RFI 20 Station Road
Attachments: CH_DP_35966__T_1.pdf; CT.PDF; LT 520862 Title Plan.pdf; encumbrance to cavalier.pdf; orion caveat.pdf

R I Response. Please note application on hold while consultation undertaken with MKT.



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [
Sent: Friday, 23 March 2018 1:30 PM
To: Kelly Andrew <
Subject: RE: RMA/2018/337 - RFI 20 Station Road

Hi Kelly

In response to your RFI, please find attached an explanation of the CT easements in plan form, which will hopefully be self explanatory. There is additionally an encumbrance to Cavalier which basically states that the site can't be used for scouring. And the Orion caveat which is recent but which we haven't found a plan for. The easement documents themselves are just worded statements, but I have them if you would like a copy of them too.

In regard the ecological assessment:

Thank you for drawing Rule 6.6.4.4 D1 to our attention.

We note that the proposed earthworks are all to occur within an existing developed and hard sealed area. No works will occur within the existing vegetated riparian area, other than to undertake any plantings necessary to fulfil the previously discussed 1996 landscape plan. The earthquake damaged stormwater system on site is to be upgraded and improved, ensuring that operational discharges to the Kaputone will be improved from what previously existed. No new structures are being erected as part of this resource consent application. Access to the Creek is already prevented by security fencing and this will continue to be the case. In regards effects on Nga Wai, runanga is currently being consulted, but we consider the improvement in stormwater systems and additional planting are supportive of Ngai Tahu values in regard the Creek. In our opinion, there will therefore be no additional operational effects on the ecology of the Kaputone Creek, including on its natural values or its amenity and character.

In regard potential adverse effects during construction, the principal potential effect is sediment or contaminant entry to the Creek. A sediment and erosion control plan has been submitted with the application and is considered sufficient to ensure that construction effects are adequately managed. Further, conditions such as accidental discovery protocol should further ensure that any potential construction effects on cultural matters are managed and effects on the Kaputone Creek Site of Ecological Significance are adequately avoided or mitigated.

Landscaping – agreed.

Other consents – we are aware of the requirements and a stormwater discharge consent application is being prepared.

Regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <
Sent: Friday, 23 March 2018 10:00 AM
To: Kim Seaton - Novo Group
Subject: RMA/2018/337 - RFI 20 Station Road

Hi Kim,

s discussed, please find attached an R I for this application. Please call me if anything further you'd like to discuss.

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kelly Andrew <
Sent: Thursday, 18 January 2018 9:22 a.m.
To: Braddick, Laura
Cc:
Subject: FW: RMA/2017/3173 hold

Good Morning Laura,

Please place this application on hold at the applicants request as below.

Thanks,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

**HARRISON
GRIERSON.
COM**

All our emails and attachments are subject to [conditions](#).

From: Kim Seaton - Novo Group [
Sent: Thursday, 18 January 2018 9:16 AM
To: Kelly Andrew <
Subject: RMA/2017/3173 hold

Hi Kelly

As per our telephone conversation, could you please put the Cloud Ocean Estate consent application on hold. We are going to work with the applicant to confirm the volumes and location of earthworks occurring on site, so that we can all have some certainty around district plan consenting requirements.

Many thanks

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew
Sent: Monday, 26 March 2018 12:54 p.m.
To: Braddick, Laura
Subject: FW: RMA20183173 - confirmation of scope
Attachments: Future Stormwater Earthworks.15.03.2018.pdf; Future Earthworks Plan - 20 Station Road - 08.02.2018.pdf



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Senior Planner

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From: Kim Seaton - Novo Group
Sent: Friday, 23 March 2018 3:14 PM
To: Kelly Andrew <
Subject: RMA20183173 - confirmation of scope

Hi Kelly

I have met this afternoon with Kirk Roberts to confirm the final earthworks volumes for all earthworks consents. As you are aware, new information has been coming in weekly, including today, as to damage and new piping systems needed and that is well beyond what we originally anticipated and applied for. Fortunately, although volumes have changed and there are new trench locations, the assessment of effects that we previously provided remain appropriate.

Volumes of soil disturbance

Retrospective: excavate 290m³ (maximum estimated size of the stockpile), inclusive of both internal and external disturbance. This material is to be handled again to remove it from site, so accounting for double handling the total volume of earthworks undertaken retrospectively is 580m³. Note that 150m³ of this material was originally excavated by Orion NZ Ltd for electrical infrastructure. Normally that material would be exempt from earthworks calculations, but given it is to be double handled, we have left it included in the total figure for simplicity.

Future: 10m³ internal structural pad/trade waste excavations and fill + 550m³ external trade waste trench excavation and fill + 590m³ external stormwater trench excavation and fill = 1150m³. Note that this volume estimate is very conservative. Fill volumes for example will in reality of lower, as pipework to be installed in the trenches will reduce the infill volume requirement.

Excavation within 10m of Kaputone Creek

Of the above volume, consent is sought for 180m³ within 10m of the Kaputone Creek. That includes 20m³ of excavation and fill that has already been undertaken retrospectively, plus 30m³ of stockpiled material that then needs to be double handled (total 60m³), plus an additional 20m³ (10m³ excavation and 10m³ fill) for future trade waste excavations and 80m³ (40m³ excavation, 40m³ fill) for future stormwater trenches.

Depth

Maximum depth 1.5m, for parts of the trenches and an internal manhole. Most earthworks will not be deeper than 1m.

Attached are the plans showing the location of the stormwater and wastewater trenches that are to be excavated or have been excavated. We do not have plans of internal excavation areas, but suffice to say all are contained within the buildings shown on the attached plans. If that level of detail is required, we can provide some internal schematics.

You will note that the total volumes of soil disturbance proposed remain below the levels permitted for a site of this size, but consent is still required for the maximum depth of earthworks and all earthworks within 10m of the Creek.

regards

Kim Seaton
Senior Planner

D:
E: kim@novogroup.co.nz | W: www.novogroup.co.nz
Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <
Sent: Monday, 26 March 2018 12:53 p.m.
To: Braddick, Laura
Subject: HPRM: FW: 20 Station Road - Sediment and Erosion Control Plan



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [
Sent: Friday, 23 March 2018 3:45 PM
To: McDonald, Yvonne ; Kelly Andrew <
Subject: RE: 20 Station Road - Sediment and Erosion Control Plan

Hi Yvonne

Until the last couple of days we understood the ESCP would be needed to respond to an RFI. (we also needed it to attach to the ECan earthworks consent). Since we already had the plan well advanced when Kelly indicated it would be a condition of consent instead, we lodged the plan anyway. So I would say that it is for information purposes now, and when the consents are issued, it can be taken to fulfil the consent conditions.

Does that sound ok from your perspective?

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: McDonald, Yvonne <
Sent: Friday, 23 March 2018 3:18 PM
To: Kim Seaton - Novo Group <k> Kelly Andrew'
Subject: RE: 20 Station Road - Sediment and Erosion Control Plan

Kim,

Are you submitting this for acceptance under either proposed RMA/2017/3173 condition 3 or proposed RMA/2018/337 condition 1 or both, in anticipation of issued consents and to fulfil the relevant conditions?

Or just for information?

Yvonne McDonald

Senior Subdivisions Engineer
CC-Planning Team 1, CC-Resource Consents Unit

DDIFax

From: Kim Seaton - Novo Group
Sent: Thursday, 22 March 2018 2:32 p.m.
To: Kelly Andrew <
Cc: McDonald, Yvonne <

Subject: FW: 20 Station Road - Sediment and Erosion Control Plan

Hi Kelly
As promised, attached is the sediment and erosion control plan for Cloud Ocean Water.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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Christchurch City Council
<http://www.ccc.govt.nz>

From: Kelly Andrew
Sent: Monday, 26 March 2018 12:58 p.m.
To: Braddick, Laura
Subject: HPRM: FW: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Confirmation of scope as at / .



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [
Sent: Thursday, 22 March 2018 10:13 AM
To: Kelly Andrew <
Cc: McDonald, Yvonne ; 'Hannah.Mirabueno@ccc.govt.nz' <
> ; Askew, Kate
> ; Tredinnick, Emily
Subject: RE: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Hi Kelly

That's generally correct. We apologise for the uncertainty – as more surveying is done of the site, more damage or trade waste requirements come to light that require earthworks, hence the changing scope. Kirk Roberts received some further survey information yesterday that confirmed that in places the stormwater trenches may require excavation to as deep as 1.5m (though mostly only to 1m), and as I confirmed just before, there is a manhole inside the building that is 1.5m in depth. Nevertheless, all of that fits within the parameters of what we originally applied for, which is a maximum depth of 1.5m excavation, and within the volumes we have already applied for.

In terms of works to be undertaken, to clarify, you will note on the "future earthworks" plan included in the application documents (p25, a Cosgroves plan) that there is also a trench down the western side of the building that is yet to be dug. That will be a trade waste pipe trench that will likely also include stormwater pipes. In any case the trench will not exceed 1.5m in depth and the volumes for that excavation are included in our estimates.

A sediment and erosion control plan has been prepared and will be provided to you today. The ECan earthworks consent is to be lodged today, leaving the stormwater discharge consent to still be lodged with ECan. The applicant already has consent from ECan for a new bore and that work has been undertaken. The District Plan exempts those bore works from consideration.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <
Sent: Thursday, 22 March 2018 9:40 AM
To: Kim Seaton - Novo Group <k
Cc: McDonald, Yvonne ; 'Hannah.Mirabueno@ccc.govt.nz' <
> ; Askew, Kate
> ; Tredinnick, Emily
Subject: RE: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Good Morning Kim,

I just want to make sure we have the scope of this proposal and consent clearly understood.

The attached plan shows the existing stockpiles on site which have been there for a while now. The material includes that from the excavation/tranches from two of the four stormwater drains which require repair on site. The volume of this material is as follows:

The applicant also seeks to undertake additional earthworks (not undertaken yet) involving: approximately 75 m³ of additional earthworks in total, approximately 15 m³ of which will be located within 10m of the Kaputone Creek. A maximum depth of 1m is assumed for the trenches. These works are to undertake the repairs for the remaining two of four stormwater drains.

No further earthworks under the district plan are proposed. All run off from stockpiles and the site are currently being managed through ESCs which have not been detailed on the site plan. Councils engineer has indicated that consent conditions will require this detail to be provided to Council. I am currently waiting to confirm this with Councils engineer. Councils waterways expert has also indicated that planting in accordance with that previously approved and required to remain in situ be retained and reinstated where required. You have noted that the applicant has a willingness to do whatever planting is needed. Similarly it is indicated at this stage that a condition may be appropriate.

Stormwater discharge is not accepted under CCCs global stormwater discharge consent. You have sought advice from ECan to obtain stormwater and other relevant consents from ECan where required. We are aware this may include consent for a bore. The scope of any earthworks associated with this is not included in the applications currently being considered by CCC (RM / / / and RM / / /).

Can you please confirm whether this summary is accurate

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024



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From: Kim Seaton - Novo Group
Sent: Thursday, 15 March 2018 4:58 PM
To: Kelly Andrew < >
Cc: McDonald, Yvonne < > 'Hannah.Mirabueno@ccc.govt.nz' < >
Subject: Cloud Ocean Water - RMA2018337/RMA20173173 Additional earthworks

Hi Kelly
As previously discussed, Kirk Roberts have recently discovered that there are two additional existing stormwater drains that will require repairing on site. The drains are earthquake damaged, but appear not to have been repaired by the previous site owners. We wish to amend the two resource consent applications currently with you, to allow for those additional earthworks. Attached is the site plan, that shows the location of all four stormwater drains on site. The two northernmost drains are the ones that we now need to include in the application. The other two are already included, as per Appendix 2 of RMA2018337 (Cosgroves Plan).

Kirk Roberts advise that the earthworks required will be as follows:
- Approximately 75m³ of additional earthworks in total, approximately 15m³ of which will be located within 10m of the Kaputone Creek. A maximum depth of 1m is assumed for the trenches.

We note that previously we discussed including a large concrete pad in the application, but given the design and location of the pad is not yet finalised, we have decided that the pad will be best dealt with under a separate resource consent.

If you need any clarification of the above, please don't hesitate to contact me.

regards
Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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Title Plan - LT 520862

Survey Number LT 520862
Surveyor Reference 17073 20 Station Road
Surveyor Mark Christopher Myall
Survey Firm Myall & Thurlow Consultants Ltd
Surveyor Declaration I Mark Christopher Myall, being a licensed cadastral surveyor, certify that:
(a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and the Rules for Cadastral Survey 2010, and
(b) the survey was undertaken by me or under my personal direction.
Declared on 19 Feb 2018 03:24 PM

Survey Details

Dataset Description Easement over Part Lot 2 DP 35966
Status Approved as to Survey
Land District Canterbury **Survey Class** Class A
Submitted Date 19/02/2018 **Survey Approval Date** 21/02/2018
Deposit Date

Territorial Authorities

Christchurch City

Comprised In

CT CB32B/1231

Created Parcels

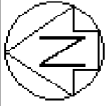
Parcels	Parcel Intent	Area	CT Reference
Area A Deposited Plan 520862	Easement		
Area B Deposited Plan 520862	Easement		
Area C Deposited Plan 520862	Easement		
Area D Deposited Plan 520862	Easement		
Total Area		<hr/> 0.0000 Ha	

Schedule / Memorandum

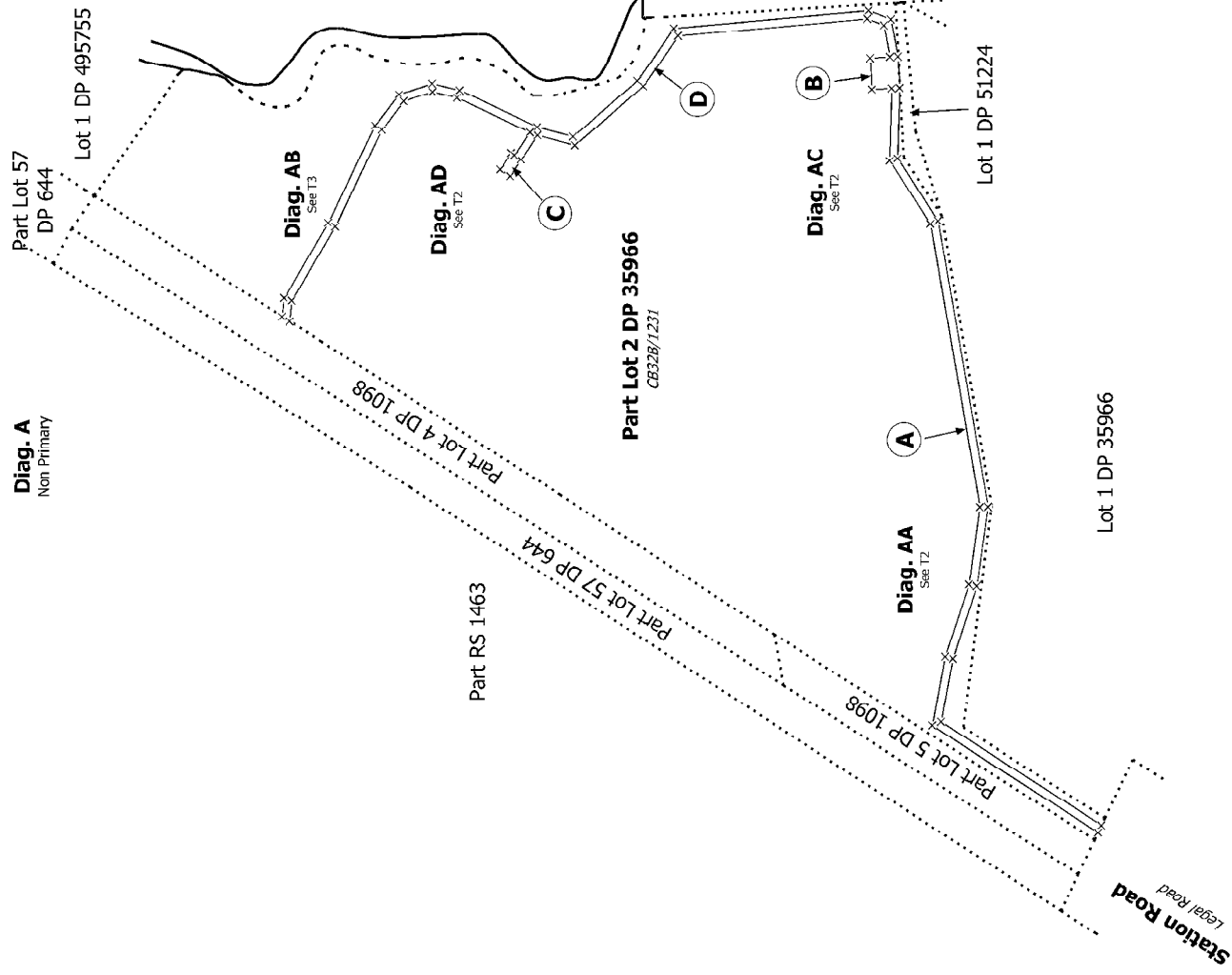
Land Registration District	Plan Number	Surveyor Ref
Canterbury	DP 520862	17073

Territorial Authority (the Council)	Council Ref
Christchurch City Council	

SCHEDULE OF EASEMENTS			
Purpose	Servient Tenement		Grantee
	Lot No	Shown	
Right to Convey Electricity in Gross	Part Lot 2 DP 35966 (CB32B/1231)	A, B, C & D	Orion New Zealand Limited



Diag. A
Non Primary



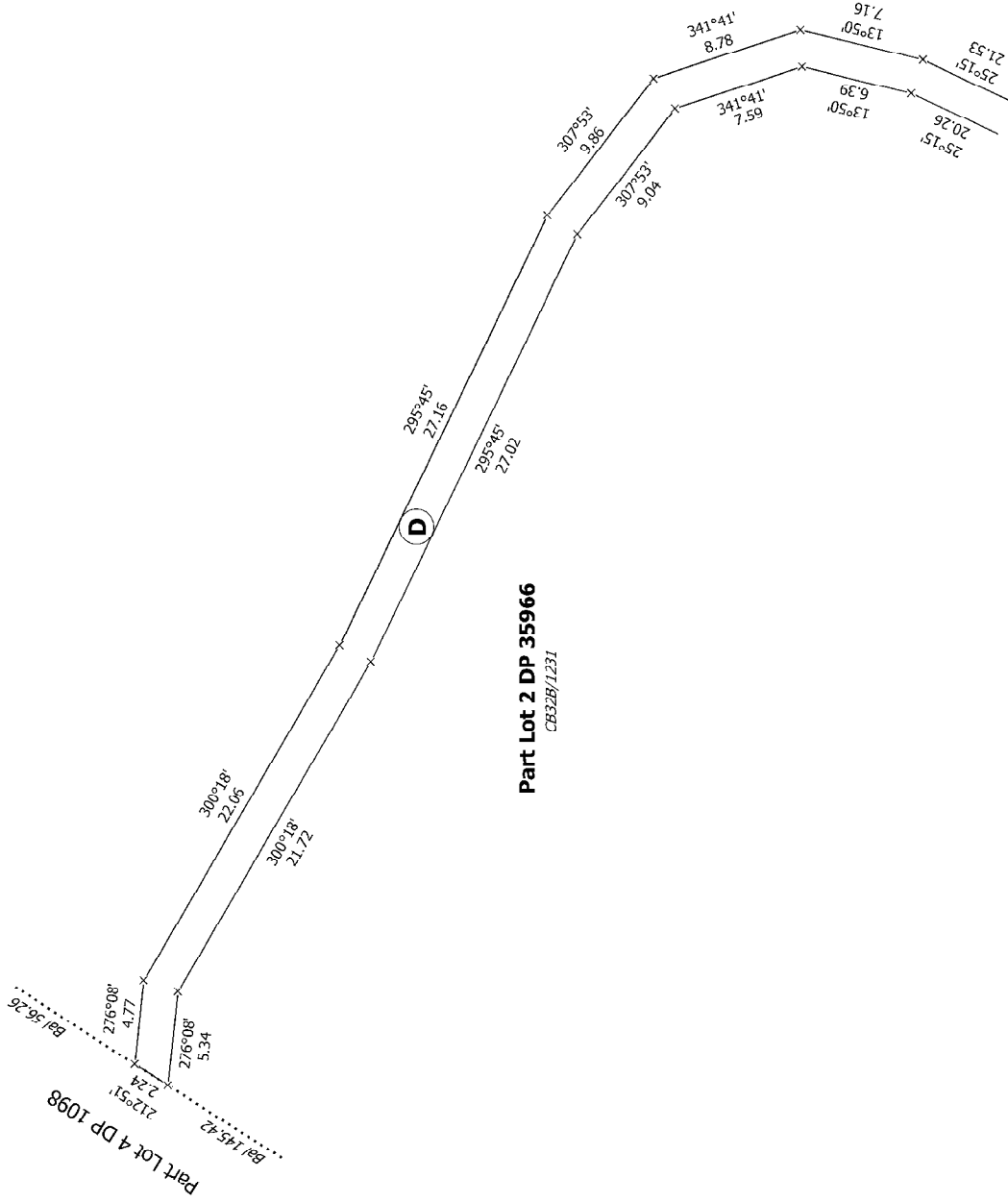
Easement over Part Lot 2 DP 35966

Surveyor: Mark Christopher Myall
 Firm: Myall & Thurlow Consultants Ltd

Title Plan
 LT 520862
 Approved on: 21/02/2018



Diag. AB
Non Primary





iew Instrument Details

Instrument Type Caveat against dealings with land under s Land Transfer ct
Instrument No .
Status Registered
Date & Time Lodged / / : :
Lodged By hytney Nicole Eulalie Spencer

Affected Computer Registers **Land District**
C / Canterbury

Registered Proprietor
Cloud Ocean ater Limited

Caveator
Orion New ealand Limited

Estate or Interest claimed
Pursuant to an agreement to grant electricity easement dated September in respect of the land contained in the within certificate of title and made between the registered proprietor Cloud Ocean ater Limited as Grantor and the abovenamed caveator as Grantee.

Notice
Take notice that the Caveator forbids the registration of any instrument, having the effect of charging or transferring, or otherwise affecting, the estate or interest protected by this caveat, until this caveat has been withdrawn by the Caveator, removed by order of the High Court, or until the same has lapsed under the provisions of Section or Section of the Land Transfer ct .

Address for Service of Caveator
Orion New ealand Limited
C/ Chapman Tripp (udith Hudson)
PO ox
Christchurch
New ealand

Address for Registered Proprietor
Cloud Ocean ater Limited
Station Road, elfast
Christchurch
New ealand

Caveator Certifications

- I certify that I have the authority to act for the Caveator and that the party has the legal capacity to authorise me to lodge this instrument
- I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument
- I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply



iew Instrument Details

Caveator Certifications

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

Signature

Signed by Stephanie Elizabeth Muller as Caveator Representative on / / : PM

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

From: Kim Seaton - Novo Group
Sent: Friday, 16 March 2018 11:49 a.m.
To: Tredinnick, Emily
Cc: Kelly Andrew; Braddick, Laura
Subject: RE: RMA/2017/3173 - 20 Station Road RE: landscape plans

Hi Emily

The applicant has agreed to undertake the planting in the 1996 consent as a requirement of this resource consent. It's very time critical that they get the earthworks consent granted so they can complete backfilling of pipe trenches and get rid of the stockpiles on site. The simplest and fastest way forward from a consenting perspective is to stick with the existing landscape plan.

What I have advised them is to get a landscape architect on board in due course to figure out what's been planted and what hasn't, and then get on with it. Worst case scenario, if for some reason that old 1996 plan is problematic to implement in places for some reason, they will need to come up with a new plan and go through a s127 process to vary the consent and get a new plan approved. Either way, Council retains control over the approved planting plan.

Thanks for your help.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Tredinnick, Emily <
Sent: Friday, 16 March 2018 11:42 AM
To: Kim Seaton - Novo Group <
Cc: Kelly Andrew ; Braddick, Laura <
Subject: RMA/2017/3173 - 20 Station Road RE: landscape plans

Hi Kim

Yes I agree with your latest conclusion, the 1996 plan covers a wider area and so my recommended condition will be along the lines of *"Planting and trees indicated in the approved landscape plan that formed part of RMA/1996/1081 should be retained where possible, and re-instated post-development works"*.

All I wanted to achieve by providing the planting plans was to give you/your client an indication of my expectations for planting. From the aerials it appears that a lot of this planting remains, and so I presume the majority of re-instatement planting would be a result of having to remove this for the proposed works. If your client would prefer to come up with a new landscape plan, we would want to ensure that this is appropriate.

Kind regards
Emily

From: Kim Seaton - Novo Group
Sent: Friday, 16 March 2018 9:01 a.m.
To: Kelly Andrew <
Cc: Tredinnick, Emily
Subject: RE: landscape plans

Hi guys

Sorry, just realised I got the landscape plans mixed up. The 1996 plan is the more comprehensive. The 2003 plan looks like it superseded the 1996 plan for just the area south of the pump shed. Looking forward to your thoughts on the overlap.

regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kim Seaton - Novo Group
Sent: Thursday, 15 March 2018 5:38 PM
To: Kelly Andrew
Cc: Tredinnick, Emily
Subject: FW: landscape plans

Hi Kelly, Emily
I've extracted the two landscape plans from those early CCC documents you sent me. They seem to overlap (going by the location of the shed) – by my reckoning the 2003 plan covers the same area (and more) that the 1996 plan covers. So the 2003 plan effectively superseded the 1996 plan. Otherwise the two plans look like they contradict each other.

Emily, in Kelly's absence, could you confirm whether you agree with the overlapping plans? Or an alternative view point? What the applicant has previously indicated is a willingness to do whatever planting is needed, but I need to confirm for them which plan to use, as soon as possible.

Many thanks
regards

Kim Seaton
Senior Planner

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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Christchurch City Council
<http://www.ccc.govt.nz>

15 February 2018

Cloud Ocean Water Limited
PO Box 76131
Northwood
Christchurch 8548
Attention: Neferteri Yang

Dear Neferteri

Application for Land Use Consent: RMA/2018/337
20 Station Road Belfast
Undertake earthworks and temporary placement of a structure near a stream
Application acknowledgment and invoice

I am writing to acknowledge receipt of your Land Use Consent application on 13 February 2018.

An invoice for the minimum application fee (deposit) is attached. Payment can be made by cheque, EFTPOS or by internet banking.

Internet banking: see details on the attached invoice.

Cheque: please send the cheque to Resource Consents Unit, PO Box 73014, Christchurch 8154.

EFTPOS: payment can be made in person at any Christchurch City Council service desk.

Processing of the application does not commence until payment is received. If payment is not received within 30 days of the issue of the invoice, the application will be returned and any costs incurred to that date (including time spent receiving the application and checking it for completeness) will be invoiced to the applicant.

Accepting and processing your application

Initially your application will be forwarded to a planner to be vetted for completeness and, if complete, accepted for processing. If your application is incomplete we will contact you within the next few days to let you know what is missing.

Once processing has commenced, a more detailed assessment may reveal the need for additional information, in which case the planner may contact you to clarify details or to ask for further information. Please respond to any queries as soon as possible to enable shorter overall processing times for your application. It is our priority to process consents as quickly as possible.

When processing has been completed, a further invoice will be sent **to the applicant** if the cost of processing it exceeds the Minimum Application Fee (deposit) paid. If the cost of processing the application is less than the deposit a refund will be issued to the person who paid the deposit.

In the meantime, please send any enquiries regarding your application to resourceconsentapplications@ccc.govt.nz.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Valeria Ferrari', with a stylized flourish at the end.

Valeria Ferrari
Resource Consent Support Officer
Development Support Team
Resource Consents Unit

Tax Invoice

GST number 53-198-554



Cloud Ocean Water Limited
PO Box 76131
Northwood
Christchurch 8548

Invoice number **119562**
Invoice date 15 February 2018

Application number RMA/2018/337
Property address 20 Station Road Belfast

Description	GST	Amount (GST incl.)
Earthworks and retaining walls	\$260.87	\$2,000.00
	\$260.87	\$2,000.00

Balance to be paid **\$2,000.00**
(GST inclusive)

These fees are due within 30 days from the date of this invoice.

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

To pay by Internet banking, use the following details:

Account **02 0800 0044765 03**
Particulars **119562**
Code **10-214346**
Reference **1324758**

Send remittance advice to revenue@ccc.govt.nz.



Civic Offices, 53 Hereford Street, Christchurch 8011
PO Box 73013, Christchurch 8154
Phone: (03) 941-8999, Fax: (03) 941-8792
ccc.govt.nz/consents-and-licences

18 December 2017

Cloud Ocean Water Limited
PO Box 76131
Northwood
Christchurch 8548
Attn: Neferteri Yang

Dear Neferteri

Application for Land Use Consent: RMA/2017/3173
20 Station Road Belfast
Undertake earthworks, including removal of contaminated soil
Application acknowledgment and invoice

I am writing to acknowledge receipt of your Land Use Consent application on 14 December 2017.

An invoice for the minimum application fee (deposit) is attached. Payment can be made by cheque, EFTPOS or by internet banking.

Internet banking: see details on the attached invoice.

Cheque: please send the cheque to Resource Consents Unit, PO Box 73014, Christchurch 8154.

EFTPOS: payment can be made in person at any Christchurch City Council service desk.

Processing of the application does not commence until payment is received. If payment is not received within 30 days of the issue of the invoice, the application will be returned and any costs incurred to that date (including time spent receiving the application and checking it for completeness) will be invoiced to the applicant.

Accepting and processing your application

Initially your application will be forwarded to a planner to be vetted for completeness and, if complete, accepted for processing. If your application is incomplete we will contact you within the next few days to let you know what is missing.

Once processing has commenced, a more detailed assessment may reveal the need for additional information, in which case the planner may contact you to clarify details or to ask for further information. Please respond to any queries as soon as possible to enable shorter overall processing times for your application. It is our priority to process consents as quickly as possible.

When processing has been completed, a further invoice will be sent **to the applicant** if the cost of processing it exceeds the Minimum Application Fee (deposit) paid. If the cost of processing the application is less than the deposit a refund will be issued to the person who paid the deposit.

Certificate of title

You have ticked the box on the application form asking us to obtain your Certificate of Title (Computer Register) from LINZ. We have done this, and the attached documents have been added to your application. Please check this attachment and contact us immediately if the title does not relate to your parcel of land.

We strongly recommend that you review your title including any covenants, consent notices, caveats, encumbrances and other interests. They may include restrictions on the use of your site which will not be dealt with through the resource consent process, but which may impact on the ability to implement your proposal. Any questions about the content of your title are best addressed to your legal advisor.

In the meantime, please send any enquiries regarding your application to resourceconsentapplications@ccc.govt.nz.

Yours sincerely



Valeria Ferrari
Resource Consent Support Officer
Development Support Team
Resource Consents Unit

Tax Invoice

GST number 53-198-554



Cloud Ocean Water Limited
PO Box 76131
Northwood
Christchurch 8548

Invoice number **116011**
Invoice date 18 December 2017

Application number RMA/2017/3173
Property address 20 Station Road Belfast

Description	GST	Amount (GST incl.)
Earthworks and retaining walls	\$260.87	\$2,000.00
	\$260.87	\$2,000.00

Balance to be paid **\$2,000.00**
(GST inclusive)

These fees are due within 30 days from the date of this invoice.

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

To pay by Internet banking, use the following details:

Account **02 0800 0044765 03**
Particulars **116011**
Code **10-214346**
Reference **1306930**

Send remittance advice to revenue@ccc.govt.nz.



Civic Offices, 53 Hereford Street, Christchurch 8011
PO Box 73014, Christchurch 8154
Phone: (03) 941-8999, Fax: (03) 941-8792
ccc.govt.nz/consents-and-licences

From: Askew, Kate
Sent: Thursday, 22 February 2018 8:32 a.m.
To: 'Kelly Andrew'
Subject: RMA/2017/3173 Reply to Processing Consultant - 20 Station Road

Thanks for getting back to me Kelly.
As I hadn't heard back from you, I had given Kim a call and we had agreed that they should be processed separately.

Regards,

Kate Askew

Senior Planner
Resource Consents Unit

Days of Work: Monday, Tuesday and Thursday

Web: www.ccc.govt.nz

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73013, Christchurch, 8154

Please consider the environment before printing this email

From: Kelly Andrew [
Sent: Wednesday, 21 February 2018 8:30 a.m.
To: Askew, Kate <
Cc: Ferrari, Valeria < ; Braddick, Laura <
Subject: RE: RMA/2017/3173 hold - 20 Station Road

Hi Kate,

I'm so sorry for not getting back to you sooner. I've had a mixture of being off sick and also having some serious computer issues which has left me helpless and very behind! I'm thankfully back up and running again.

The applicant placed the application on hold at their request while they discussed some unknowns with Kirk Roberts and their client. Kim kept me updated and let me know they would be seeking consent for earthworks.

I had reviewed the new material last week and have spoken to Kim. In terms of whether the consents are processed separately (i.e. NES separate from Land Use which includes earthworks and works within waterbody setback) OR whether they are combined I'm not too concerned either way. I think the contamination aspect could possibly be dealt with separate as this issue in particular has been monitored by Hannah Mirabueno from Council.

In my silence I see that Laura has sent through the separate consent for earthworks for processing so if you don't have any issues I'll continue on and process both as two separate consents.

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

**HARRISON
GRIERSON.
COM**

All our emails and attachments are subject to [conditions](#).

From: Askew, Kate [
Sent: Thursday, 15 February 2018 10:48 AM
To: Kelly Andrew <
Cc: Ferrari, Valeria <
Subject: RMA/2017/3173 hold

Hi Kelly,

Valeria has just let me know that a second consent has been lodged for the earthworks breaches with the City Plan. AS the activity is the same, it seems sensible that this information be incorporated into the consent already being processed by you. Is this what was requested by you, has the applicant got the wrong end of the stick? Could you please clarify if you were expecting this information.

Can you please CC Valeria in on your reply.

Regards,

Kate Askew

Senior Planner
Resource Consents Unit

Days of Work: Monday, Tuesday and Thursday

Web: www.ccc.govt.nz

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73013, Christchurch, 8154

Please consider the environment before printing this email

From: Kelly Andrew [
Sent: Thursday, 18 January 2018 9:22 a.m.
To: Braddick, Laura <
Cc:
Subject: FW: RMA/2017/3173 hold

Good Morning Laura,

Please place this application on hold at the applicants request as below.

Thanks,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [
Sent: Thursday, 18 January 2018 9:16 AM
To: Kelly Andrew <
Subject: RMA/2017/3173 hold

Hi Kelly

As per our telephone conversation, could you please put the Cloud Ocean Estate consent application on hold. We are going to work with the applicant to confirm the volumes and location of earthworks occurring on site, so that we can all have some certainty around district plan consenting requirements.

Many thanks

regards

Kim Seaton
Senior Planner



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Christchurch City Council

<http://www.ccc.govt.nz>

Report / Decision on a Non-notified Resource Consent Application

(Sections 95A, 95B, and 104 / 104B)

Application Number: RMA/2017/3173
Applicant: Cloud Ocean Water Limited
Site address: 20 Station Road, Belfast
Legal Description: Part Lot 2 DP 35966
Zoning: Christchurch District Plan: Industrial Heavy

Overlays and map notations: Upstream waterway – Kā Pūtahi Stream (Kaputone Steam)
Liquefaction Management Area (LMA)
Mahaanui Iwi Management Plan Silent File ID: 1
Ngā Wai Lakes, Rivers and Streams
Adjacent to Site of Ecological Significance (Appendix 9.1.6.1 Schedule A) ID: SES/LP/28
Ecological Site (Appendix 9.1.6.1 Schedule B) ID: SES/LP/28

Activity Status: NES: Discretionary

Description of Application: Soil disturbance associated with the installation of new underground services and drainage network on land where an activity identified on the Hazardous Activities and Industries List (HAIL) has been undertaken.

Introduction

The application site at 20 Station Road was previously used for a wool scour facility, which is a HAIL activity. The site is listed on Environment Canterbury's Listed Land Use Register (LLUR) as either partially or not investigated. The applicant seeks a resource consent under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (**NES**). Consent is sought for soil disturbance and soil removal associated with site works which are currently being undertaken as part of an upgrade to the power network, comprising the installation of new underground services, as well as the installation of a new drainage network.

Some of the works have already been undertaken, with some remaining to be completed. There are areas on the site where soil is currently being stockpiled. An abatement notice has been issued by Christchurch City Council (**Council**) (Reference LEX19312) dated 21 December 2017. The abatement notice required the applicant to cease earthworks, prevent discharge of any contaminants, remove holding tanks and undertake a detailed site investigation of all areas disturbed. Accordingly works have ceased and the disturbed soil has been stockpiled on site and sediment controls installed.

Kirk Roberts Consulting Engineers (Kirk Roberts) have prepared a Site Management Plan (SMP) which regard to the soil disturbance activities on the site. The Kirk Roberts SMP explains that:

'The LLUR indicates that both potentially contaminating activities are currently ongoing, and that the site has not been subject to previous environmental investigations. Accordingly, the contamination status of site soils is currently unknown, and until future detailed environmental site investigations are undertaken on the site, the presence of the hazardous substances in site soils cannot be discounted. This SMP has been developed on the anticipation that site soils contain contaminants at concentrations which represent a risk to human health'.

The extent of soil disturbance is initially outlined in section 1.2 of the Kirk Roberts report. Following their application, the applicant became aware of new information requiring repair of damaged pipes and installation of new underground services and as such further earthworks were needed beyond what was originally applied for. The revised scope including retrospective and future earthworks is set out in an email from the applicant (received 23/03/2018). The scope of the works, in volumes of soil disturbance, is as follows:

- Already undertaken: 290m³ (maximum estimated size of the stockpile), inclusive of both internal and external disturbance (internal where soil has been excavated within the building footprint).
- Future: 5m³ internal structural pad/trade waste excavations; 225m³ external trade waste trench excavation; and 295m³ external stormwater trench excavation = 525m³.

The applicant confirmed that all material excavated on the site will be removed from the site. The total volume to be disposed off-site will be 815m³.

Resource consent is required under the NES. A separate resource consent has been sought for earthworks and earthworks within the waterway setback of the Kā Pūtahi Stream (Kaputone) (reference RMA/2018/337).

Existing environment

The Kirk Roberts SMP explains that a Detailed Site Investigation (DSI) has previously been undertaken on this piece of land to support resource consent applications. The DSI investigated six pre-determined locations within the outdoor storage yard area around the perimeter of the site. Additional earthworks are proposed in untested areas of the yard, and additional excavation works associated with the installation of a new drainage network are also proposed within the existing building footprints. These areas were not investigated in the DSI, and so the contamination status of these site soils is currently unknown. In the context of the long development history of the site, and as per the recommendations detailed in the DSI report, Kirk Roberts advised that the soils in untested locations should be treated as potentially contaminated during the earthworks, with environmental monitoring undertaken during the works to provide on-site assessments.

Despite this being known, earthworks have been undertaken on site and disturbed soil is currently being stockpiled. The abatement notice issued by Council required:

- Earthworks and filling activities to cease;
- Prevent discharge of contaminants;
- Remove holding tanks from with the waterway setback; and
- Undertake a detailed site investigation of areas that have been disturbed and provide results to Council's Environmental Health Team.

Accordingly works have ceased and the disturbed soil has been stockpiled on site. The applicant has advised that due to concern regarding potential contamination, stockpiles were covered following the abatement notice. The applicant notes that there have been sediment socks along the perimeter of the piles where they adjoin the Kaputone Stream (possibly around the entire perimeter, although this was not certain at the time).

Council's Environmental Health Officer, Ms Hannah Mirabueno, confirms that the excavated material that is currently stockpiled and the trenches that have already been backfilled require resource consent under the NES.

Kirk Roberts have provided further testing results which are discussed further in the assessment below.

Classification of activity

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

These standards became operative on 1 January 2012 and seek to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and if necessary the land is remediated or contaminants contained to make the land safe for human use.

The NES controls soil disturbance on land where an activity on the Ministry for the Environment's Hazardous Activities and Industries List (HAIL) is being carried out, has been carried out, or is more likely than not to have been carried out. The application site has been identified as HAIL land therefore the provisions of the NES apply.

The proposal requires consent under the NES as it breaches the following provisions:

- **Regulation 8(3)(c)** – the volume of soil disturbance proposed (including soil already disturbed) is 815m³ which will exceed the standard of not removing more than 25m³ per 500m².

- **Regulation 8(3)(d)(ii)** - the volume of soil proposed to be removed from the site is 815m³ which will exceed the standard of not removing more than 5m³ per 500m².

Pursuant to Regulation 11 the proposal is a discretionary activity under the NES as:

- A Detailed Site Investigation (DSI) of the piece of land exists, however not all areas proposed for earthworks have been investigated; and
- The DSI states that the soil contamination exceeds the applicable standard in Regulation 7, and the report has been provided to the Council.

Written approvals [Sections 95D, 95E(3)(a) and 104(3)(a)(ii)]

No written approvals have been provided with the application.

Effects on the environment and adversely affected persons [Sections 95A, 95B, 95E(3) and 104(1)(a)]

The application is a discretionary activity under the NES. As a discretionary activity the Council's assessment is unrestricted and all actual and potential effects of this proposal must be considered. Relevant guidance is contained in the matters of discretion as to the effects that require consideration.

Detailed Site Investigation

Specialist advice on the application has been obtained from Ms Hannah Mirabueno, Environmental Health Officer, whose comments are summarised as follows:

This application is partly retrospective due to the fact that earthworks have been carried out prior to lodgement of consent. The detailed site investigation was undertaken outside the buildings, but not undertaken within the building. Earthworks have been undertaken within the building and also in the outdoor area that were not tested. Some of the excavated material is currently stockpiled on the site which would require removal.

There are areas of trenching which have already been backfilled. Kirk Roberts have provided further testing results of the biggest stockpile material to determine the appropriate disposal facility. These are recorded as 18/159572. Aside from the main stockpile, there are three smaller piles on the site which would all require disposal. The stockpile soil testing results showed that the soil would meet Burwood acceptance criteria. However, the presence of hardfill in the pile may preclude disposal to Burwood. Provided the Site Management Plan (SMP) by Kirk Roberts and the recommended conditions are followed, any risk to human health from the contamination on the site would be less than minor.

Ms Mirabueno has recommended conditions requiring that the applicant notify Council of any further earthworks and prepare and submit an Environmental Management Plan (EMP) to Council. The EMP is to include details of Erosion and Sediment Controls along with the Site Management Plan (SMP) which has been prepared by Kirk Roberts. Conditions also specify that works are to be undertaken by a suitably qualified and experienced practitioner (**SQEP**) as well as suitable disposal of material and site validation.

Remediation and management of risk

Further to Ms Mirabueno's assessment I refer to the SMP prepared by Kirk Roberts which sets out minimum standards to be complied with relating to potential contamination issues associated with the proposed earthworks. In particular section 3.1 outlines controls on subsurface works that will:

- Minimise worker and public contact with contaminated, or potentially contaminated soil;
- Ensure that contaminated, or potentially contaminated soil and water are appropriately managed;
- Minimise the potential for excavated material to be spread on the site surface or migrate from the site through implementation of dust and erosion control measures; and
- Minimise risk to local ecology.

The SMP also identifies sediment management controls in accordance with Environment Canterbury requirements which are recommended to be implemented on site through a comprehensive sediment management plan.

Subject to compliance with the SMP and conditions recommended by Ms Mirabueno, I am satisfied that the site will be appropriately managed so as to avoid adverse effects on human health.

Stormwater discharge

Consideration is also given to discharge from the site as a result of the activity. There is the potential for rainwater falling on contaminated excavations to come into contact with contaminated soil and become contaminated itself.

Specialist input has been provided from Council Engineer Victor Mthamo who has advised that consent will be required from Environment Canterbury (ECan) for the discharge of stormwater. Advice has been provided to the applicant confirming this (email from Mr Mthamo, dated 24.01.2018). The applicant has met with ECan and are taking steps to apply for the relevant consents required.

I note that this consent authorises earthworks for the purpose of the removal of contaminants regulated by the NES. Pursuant to Rule 8.9.3(xv) the activity is exempt from the provisions of the Christchurch District Plan and a separate resource consent has been sought for all other earthworks. As concluded by Ms Mirabueno above, provided that the SMP and recommended conditions are followed, any risk to human health from the contamination on the site is considered acceptable. The effects associated with earthworks not covered by this consent, including potential effects associated with the discharge of stormwater are not considered as this is an Ecan consent matter. Notwithstanding, the SMP provides for the control and management of run off from stockpiles on site.

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 TESTS – Section 95A

<i>Step 1: Mandatory notification – section 95A(3)</i>	
Has the applicant requested that the application be publicly notified?	No
Is public notification required under s95C (following a request for further information or commissioning of report)?	No
Is the application made jointly with an application to exchange reserve land?	No
<i>Step 2: If not required by Step 1, notification is precluded if any of these apply – section 95A(5)</i>	
Does a rule or NES preclude public notification for all aspects of the application?	No
Is the application a controlled activity?	No
Is the application a restricted discretionary or discretionary activity for a subdivision?	No
Is the application a restricted discretionary or discretionary activity for residential activity?	No
Is the application a boundary activity (other than a controlled activity)?	No
<i>Step 3: Notification required in certain circumstances if not precluded by Step 2 – section 95A(8)</i>	
Does a rule or NES require public notification?	No
Will the activity have, or is it likely to have, adverse effects on the environment that are more than minor? (discussed above)	No
<i>Step 4: Relevant to all applications that don't already require notification – section 95A(9)</i>	
Do special circumstances exist that warrant the application being publicly notified?	No

In accordance with the provisions of section 95A, the application must not be publicly notified.

LIMITED NOTIFICATION TESTS – Section 95B

<i>Step 1: Certain affected groups/persons must be notified – sections 95B(2) and (3)</i>	
Are there any affected protected customary rights groups or customary marine title groups?	No
If the activity will be on, adjacent to, or might affect land subject to a statutory acknowledgement - is there an affected person in this regard?	No
<i>Step 2: If not required by Step 1, notification is precluded if any of the following apply – section 95B(6)</i>	
Does a rule or NES preclude limited notification for all aspects of the application?	No
Is this a land use consent application for a controlled activity?	No

<i>Step 3: Notification of other persons if not precluded by Step 2 – sections 95B(7) and (8)</i>	
Are there any affected persons under s95E, i.e. persons on whom the effects are minor or more than minor, and who have not given written approval? (<i>discussed above</i>).	No
<i>Step 4: Relevant to all applications – section 95B(10)</i>	
Do special circumstances exist that warrant notification to any other persons not identified above?	No

In accordance with the provisions of section 95B, the application must not be limited notified.

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

Regard must be had to the relevant objectives and policies in the Christchurch District Plan. Of particular note, Chapter 3 contains a number of high level strategic objectives to guide the recovery and future development of the City.

Under the Christchurch District Plan, Chapter 16 (Industrial) contains various objectives which seek to guide the recovery and growth of the district's industry in existing and new greenfield industrial zones. The proposal is considered generally consistent with these objectives and policies which support redevelopment of existing industrial activities while managing effects of these on the receiving environment.

I also consider that the application is consistent with the objectives and policies in Chapter 4 Hazardous Substances and Contaminated Land. In particular objectives 4.1.2.1 and 4.2.2.1 as the effects of the earthworks will be managed to protect people and the environment.

In my opinion the application is consistent with the other relevant objectives and policies, as the proposal will maintain the health and safety of people and communities with the appropriate management and removal of potentially hazardous substances which exist on the site.

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

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

The National Environmental Standard for managing contaminants in soil to protect human health is relevant to this application and is discussed above.

It is noted that the discharge of stormwater from the site will require resource consent from Environment Canterbury. An advice note to this effect is recommended.

Part II of the Resource Management Act and any other relevant matters [Section 104(1) and 104(1)(c)]

I have had regard to Part II matters in considering the actual and potential effects on the environment of allowing the activity and relevant provisions of the NES and Christchurch District Plan. There are no matters of invalidity, incomplete coverage, uncertainty of meaning or conflict within the NES or Christchurch District Plan that require further consideration of Part II matters.

Section 104(3)(d) notification consideration

Section 104(3)(d) states that consent must not be granted if an application should have been notified and was not. No matters have arisen in the assessment of this application which would indicate that the application ought to have been notified.

Recommendations

That, for the above reasons:

- A. The application be processed on a **non-notified** basis in accordance with Sections 95A - 95F of the Resource Management Act 1991.
- B. The application **be granted** pursuant to Sections 104, 104B, and 108 of the Resource Management Act 1991, subject to the following conditions:
1. The development shall proceed in accordance with the information and plans submitted with the application, including the further information/amended plans confirming the scope of the works submitted on 23.03.2018. The Approved Consent Documentation has been entered into Council records as RMA/2017/3137 (110 pages) including plans at page 105 - 110.
 2. The consent holder shall notify the Council five days before the start of further earthworks. The notification shall be by email to envresourcemonitoring@ccc.govt.nz.
 3. All earthworks on site shall be managed in accordance with an Environmental Management Plan (EMP) which shall be submitted to Council for acceptance (envresourcemonitoring@ccc.govt.nz). The EMP shall include an Erosion and Sediment Control Plan (ESCP) and the Site Management Plan (SMP) by Kirk Roberts, dated December 2017. The EMP shall be implemented on site over the construction phase and no works are to commence until such time as the EMP has been installed. 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 map showing the location of all works;
 - Detailed plans showing the location of sediment and dust control measures, on-site catchment boundaries and sources of runoff;
 - Drawings and specifications of designated sediment and dust control measures;
 - A programme of works, which includes but is not limited to, a proposed timeframe for the works;
 - Installation of devices until the site is stabilised (i.e. grassed); and
 - Inspection and maintenance schedules for the sediment and dust control measures.
 - A site description, i.e. topography, vegetation, soils, etc;
 - Details of proposed activities;
 - Drawings showing the protection of natural assets and habitats;
 - Emergency response and contingency management;
 - Procedures for compliance with resource consents and permitted activities;
 - 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: CCC IDS clause 3.8.2 contains further detail on Environmental Management Plans.

4. On-site environmental monitoring should be undertaken during soil disturbance activities by a suitably qualified and experienced practitioner (**SQEP**).
5. Any soil to be removed from the site shall be tested by a SQEP prior to removal to determine the appropriate disposal facility.
6. Any additional soil testing shall be undertaken by a SQEP.
7. To minimise the spread of contaminated material, all stockpiles of excavated potentially contaminated material shall be located on an impermeable surface within the catchment of erosion and sediment controls for the site. All stockpiles shall be covered with either polythene or an equivalent impermeable material when the site is not being worked and during periods of heavy rain or wind.
8. All excavated areas on site shall be sealed or capped or disposed to an authorised facility.
9. All contaminated soils removed from the site will not be suitable to be disposed of at a cleanfill facility and must be disposed of at a facility whose waste acceptance criteria permit the disposal. Evidence of disposal to authorised facilities shall be included in the site validation report (Refer to Condition 12).
10. In the event of contamination discovery e.g. visible staining, odours and/or other conditions that indicate soil contamination, then work must cease until a SQEP has assessed the matter and advised

of the appropriate remediation and/or disposal options for these soils. Any measures to address the discovered soil contamination must be approved by the Christchurch City Council (envresourcemonitoring@ccc.govt.nz).

11. Within three (3) months of completion of earthworks, the applicant shall supply to the Council an ongoing, long term site management plan that informs the site owners on how any subsequent work on the property that may involve the handling or disturbing of soils or paving may be carried out safely. This should be sent by email to envresourcemonitoring@ccc.govt.nz. The long term site management plan shall be approved and accepted by the Council.
12. Within three (3) months of the completion of the earthworks, the site validation report shall be prepared by the project's contaminated land specialist and outlining the works undertaken. The site validation report shall include at least the following:
 - a) Statement of the volumes of soil:
 - Disturbed by the works;
 - Disposed offsite and confirmation of disposal facility location;
 - Cleanfill materials imported to site, including any supporting analytical data where appropriate.
 - b) Records of any contaminated land related incidents related to the release of soil contaminants, if any;
 - c) Records of all additional testing results, including their sampling locations; and
 - d) Confirmation that all disturbed areas have been sealed or capped.

Advice Notes:

- This resource consent covers disturbance of contaminated soil for its remediation only. A separate resource consent is required for earthworks and any other non-compliances on the site.
- The applicant should be aware that a separate resource consent(s) will be required from Environment Canterbury for the discharge of stormwater from this site. Environment Canterbury can be contacted on 355-9007 or 0800 324 636.
- Disposal of tested soils to location other than Burwood Landfill or an approved landfill facility with respect to any hydrocarbon impacted soils may also need the approval of Environment Canterbury.
- This site may be an archaeological site as declared by Heritage New Zealand Pouhere Taonga. Under Section 43 of the Heritage New Zealand Pouhere Taonga Act 2014, an archaeological site may be any place that was associated with human activity in or after 1900, and provides or may be able to provide, through investigation by archaeological methods, significant evidence relating to the historical and cultural heritage of New Zealand. Please contact Heritage New Zealand Pouhere Taonga on infosouthern@heritage.org.nz or (03) 357 9629 before commencing work on the land.
- The consent holder should adhere to an Accidental Discovery Protocol set out in Appendix 3 of the Mahaanui Iwi Management Plan: <http://mkt.co.nz/mahaanui-iwi-management-plan/>

Should any archaeological material or sites be discovered during the course of work on the site, work in that area of the site shall stop immediately and the appropriate agencies including Heritage New Zealand and the Ngāi Tūāhuriri Rūnanga (on behalf of local Mana Whenua) shall be contacted immediately.

- The Council will require payment of its administrative charges in relation to monitoring, as authorised by the provisions of section 36 of the Resource Management Act 1991. The current monitoring charges are:
 - (i) Two inspections: A monitoring fee of \$444 to cover the cost of setting up a monitoring programme and carrying out two site inspections to ensure compliance with the conditions of this consent; and
 - (ii) Time charged at an hourly rate of \$118.50 incl. GST if additional monitoring is required, including non-compliance with conditions.

Reported and Recommended by: Kelly Andrew – Consultant Planner

Date: 05.04.2018

Reviewed by: Rachel Ducker – Consultant Planner

Date: 05.04.2018

Decision

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

Delegated Officer:

A handwritten signature in black ink, appearing to read 'Ruth Markham-Short', with a long horizontal flourish extending to the right.

Markham-Short, Ruth
11/04/2018 2:24 PM
Team Leader Planning

Resource Consents Unit

Application for a Resource Consent: Land Use

Resource Management Act 1991 – Form 9

Submit this form online at: onlineservices.ccc.govt.nz; or
 Email to: resourceconsentapplications@ccc.govt.nz; or
 Deliver to: Resource Consents Unit, Christchurch City Council, 53 Hereford Street, Christchurch; or
 Send to: Resource Consents Unit, Christchurch City Council, PO Box 73014, Christchurch Mail Centre, Christchurch, 8154
 For enquiries phone: (03) 941 8999 or email DutyPlanner@ccc.govt.nz

About this form

This form is to be used for an application for land use consent under Section 88 of the Resource Management Act 1991 (RMA). It must be accompanied by plans, a Certificate of Title and other supporting information.

A deposit (minimum application fee) is required to be paid before processing will commence (refer Resource Management [Fee Schedule](#)). An invoice will be issued when the application has been received.

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

Please also refer to the important information for applicants contained in Sections 15 and 16 of this form.

1. Pre-application discussions

Have you had a pre-application meeting or discussions with any Council staff about this proposal? Yes No

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

Date of pre-application meeting (if applicable):

Meeting reference number:

2. Controlled activity application

Is this a land use consent application for a **controlled activity** only, under the District Plan? (defined as a fast-track application under section 87AAC of the RMA) Yes No

If **Yes**, do you wish to opt out of the fast-track process? Yes No

Please note:

- If the application involves any activities other than controlled land use activities under the District Plan, it is not a fast-track application.
- An application ceases to be fast-track if it is publicly notified or limited notified, or a hearing is to be held.
- An electronic address for service must be provided for an application to be a fast-track application.

3. Application site

Street address:

Legal description:

I have provided a Certificate of Title (Computer Register) less than 3 months old, including a copy of any consent notice, covenant or other encumbrance to which the Council is a party. Note: These can be obtained from Land Information New Zealand: <https://apps.linz.govt.nz/survey-titles/order-copy/>

OR

I request that the Council obtain a copy of the Certificate of Title (Computer Register) and any relevant encumbrances from Land Information New Zealand and on-charge the cost to me.

4. Applicant details

Please note that the **applicant** is responsible for the fees associated with this application, unless specified otherwise in Section 6. Where there is an agent, it is the Council's practice to communicate with both the agent and the applicant.

Full name (including middle name):

OR

Registered Company / Trust / Organisation name:

Contact person / Trustee names:

Landline: Mobile :

Email:

Postal Address:

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

Other (please specify):

5. Agent details

Name of Agent:

Name of firm:

Landline: Mobile :

Email:

Postal Address:

6. Invoicing details

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

Applicant Agent

Existing 'on-account' customer State name of PMO:

Other (specify below)

Name:

Email:

Postal Address:

Note: Any refunds will be paid to the receipted name unless written authorisation has been received from the receipted person or company.

7. Owners and occupiers of the application site

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

Land owned and occupied by applicant.

8. Description of proposal

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

To undertake earthworks on site, including removal of contaminated soil, in excess of the volumes permitted by the NES (see attached DSI and SMP for details).

9. Areas of non-compliance

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

Consent is sought under Section 10 of the NES for contaminated soils.

10. Assessment of Effects

Assessment of any effects on the environment in accordance with Schedule 4 of the Resource Management Act 1991, including reference to the assessment matters in the District Plan where relevant. *This section MUST be completed to a level of detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (Use additional pages if necessary).*

See attached DSI and SMP

11. National Environment Standard (NES)

This section relates to the National Environmental Standard (NES) for Assessing and Managing Contaminants in Soil to Protect Human Health. www.mfe.govt.nz/laws/standards/contaminants-in-soil

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

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

Is the application site listed on Environment Canterbury's Listed Land Use Register (LLUR)? www.llur.ecan.govt.nz . If YES, please include a copy of the LLUR statement with your application.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If the site is not listed on the LLUR, is an activity described on the Hazardous Substances and Industries List (HAIL) currently being undertaken on the piece of land to which this application relates, or is it more likely than not to have ever been undertaken on the land? The HAIL list is available at: http://www.mfe.govt.nz/land/hazardous-activities-and-industries-list-hail	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Type of HAIL activity: *Previous wool scour facility*

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

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

Will the proposed activity involve disturbance of more than 25m ³ of soil (per 500m ² of disturbed area)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
---	---	-----------------------------

Volume of soil disturbance: *Total area disturbed to be approximately 270m³.*

Will the proposed activity involve removal of more than 5m ³ of soil (per 500m ² of disturbed area) from the site?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
--	---	-----------------------------

Volume of soil removal: *Total of approximately 60m³ to be removed..*

Does the application involve changing the use of the land to one which, because the land has been subject to a HAIL activity, is reasonably likely to harm human health? (e.g. service station to office, orchard to residential)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
---	------------------------------	--

Does the application involve removing or replacing a fuel storage system or parts of it?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
--	------------------------------	--

Does the application involve subdivision of the land?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
---	------------------------------	--

If the answer to any of the above activity questions is also YES, then the NES **will** apply.

- Soil disturbance or removal exceeding the specified volumes requires resource consent.
- Changing the land use or subdividing the land will require resource consent if the permitted activity requirements of the NES are not complied with. These include provision of a Preliminary Site Investigation carried out by a suitably qualified and experienced practitioner.
- Removal or replacement of a fuel storage system will require consent if the permitted activity requirements of the NES are not complied with.

Does the proposed activity require resource consent under the NES?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
--	---	-----------------------------

If the answer is YES, an assessment of the application under the NES must be provided as part of your Assessment of Effects on the Environment (refer Section 10 above). A Detailed Site Investigation may be required.

12. Other Applications

Have you applied for, or are you required to apply for, any other **resource consents** for this project, either from the Christchurch City Council or Environment Canterbury, and if so, what type?

		Has been applied for:	Is required to be applied for:	Has been obtained:	Reference no. (if applicable):
Christchurch City Council	Subdivision Consent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.
	Other Land Use Consent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.
Environment Canterbury	Water Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Click here to enter text.
	Discharge Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.
	Coastal Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.

OR

No additional resource consents are needed for the proposed activity.

Have you applied for a **Project Information Memorandum (PIM)** or a **building consent** for this project?

Yes

No

If yes, what is the project number (BCN number)?

BCN/2017/10419

13. Development Contributions

The following information is required for assessment of levies under the Development Contributions Policy.

Residential development

The use of land or buildings for living accommodation purposes including residential units such as dwellings, serviced apartments and until/strata development but excluding retirement villages and travellers accommodation such as hotels, motels and hostels.

Existing:

Number of residential units:

New Total (Existing plus proposed):

Number of residential units:

Has a residential unit been demolished/removed from the site? Yes

Date:

The following section applies when there will be more than one residential unit on the site:

Gross floor area (all buildings):

Gross floor area of each unit:

(Attach separate page if necessary)

The following section applies where there will be two or more **attached** residential units are on the site:

Impervious surface area

Impervious surface area:

**Impervious Surface Area includes the area of roofs, paving and gravel.*

Non-residential Development

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

Existing:

Impervious surface area:*

Landscaping area (lawn/garden):

Gross floor area for each land use activity:

Gross floor area: Land Use:

Gross floor area: Land Use:

Gross floor area: Land Use:

New total (Existing plus proposed):

Impervious surface area:*

Landscaping area (lawn/garden):

Gross floor area for each land use activity:

Gross floor area: Land Use:

Gross floor area: Land Use:

Gross floor area: Land Use:

Total gross floor area: m²

Total gross floor area: m²

*Impervious Surface Area includes the area of roofs, paving and gravel.

Special Assessment

If the development is one that is not recognised as a residential or non-residential land use (as above), please provide the following information for a special assessment of development levies.

Existing:

Impervious surface area:* m²
Traffic movements per day:
Litres of water usage per day:

New total (Existing plus proposed)

Impervious surface area:* m²
Traffic movements per day:
Litres of water usage per day:

*Impervious Surface Area includes the area of roofs, paving and gravel.

Note: For mixed use developments please complete all relevant sections above.

Connections to Council Infrastructure

Does this development require connection/s to the following:

Water supply	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Stormwater	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Wastewater	<input type="checkbox"/> Yes	<input type="checkbox"/> No

14. Declaration

I have completed all relevant sections of this form (including the checksheet in Section 16), and I understand that my application may be returned as incomplete if it does not include all of the relevant information.

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

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


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

Date 14 December 2017

Print name Kim Seaton

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

15. Fee information

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

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

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

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

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

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

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

16. Additional notes for the applicant

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

17. Checklist

This checklist has been produced to assist you in the preparation and lodgement of your application. The provision of correct and accurate information will ensure that delays are kept to a minimum. Please complete all sections using **Y** where the information is provided, or **N** where the information is not required.

[Y]	a. Application Form P-001 (1 copy)
[Y]	Completed and signed application form, including a full description of the proposal, a list of the ways in which it does not comply with the Christchurch District Plan and/or NES, and an assessment of effects on the environment
[Y]	b. Location of Application Site
[]	Copy of current Certificate of Title (Computer Register) less than 3 months old, including any consent notices, covenants or other encumbrances to which the Council is a party. <i>(Note: The Council can obtain this from Land Information New Zealand on your behalf)</i>
[N]	c. Application Fee / Deposit
[]	Fees payable and internet banking details are set out in the Resource Management <u>Fee Schedule</u> .
[Y]	d. Site Plan (1:200) showing (where relevant)
[]	Location and use of all existing and proposed buildings in relation to legal and internal boundaries;
[]	Location of any waterway and dimensions from its banks to any new buildings and/or earthworks (see also g. below);
[]	Vehicle access, manoeuvring, parking spaces and driveway gradients;
[]	Outdoor living, service and storage space;
[]	Landscape plan showing location, species and height of all existing and proposed plants;
[]	Location of protected trees on the site or adjoining sites;
[]	Location of street trees on road reserve adjoining the application site;
[]	Areas of proposed filling or excavation, retaining walls and existing and proposed ground levels;
[]	Building coverage (proposed and existing) in square meters; and
[]	Surveyed ground and floor levels (especially at critical points to show District Plan compliance).
[N]	e. Floor Plans (1:100 / 1:50) showing (where relevant)
[]	Proposed uses;
[]	Gross floor areas for each use;
[]	Location of all/any kitchen facilities;
[]	Doors and windows; and
[]	Overall dimensions of all buildings.
[N]	f. Elevations (1:100 / 1:50) showing (where relevant)
[]	Recession planes from accurate levels;
[]	Maximum height; and
[]	Doors and windows.
[N]	g. Water body setback intrusions (in addition to other information on this checksheet)
[]	The location of the required water body setback, measured in accordance with Appendix 6.11.5.2 and 6.11.5.3 of the District Plan;
[]	The amount of building intrusion within the setback (in m ²), including any proposed decking;
[]	Volume and location of proposed excavation and filling within the water body setback;
[]	An assessment of the effects of the intrusion on the water body environment; covering the matters in Rule 6.6.7 of the District Plan;
[]	For water bodies defined as Nga Wai in Appendix 9.5.6.4, an assessment of the proposal against the matters in Rule 9.5.5.3 of the District Plan (also refer to the Mahaanui Iwi Management Plan at www.mkt.co.nz)

- [] Details of any bank maintenance and/or enhancement works; and
- [] An assessment of the effects of the activity where the water body is identified as a Site of Ecological Significance in Schedule A of Appendix 9.1.6.1.

[Y] h. HAIL (land contamination) information

- [Y] Details of any known areas of contamination, or potential contamination identified on Environment Canterbury's Listed Land Use Register (www.llur.ecan.govt.nz) and/or in a contamination investigation report.
- [N] A copy of the LLUR statement if the site is listed on the Register.
If the land is contaminated or potentially contaminated (refer Section 8 of this form) a report from a suitably qualified and experienced practitioner (e.g. consultant experienced in investigating and managing contaminated land) outlining how the works will be managed to avoid potential effects on the health of neighbours and people living and working on the site, and on the environment. A Preliminary Site Investigation or Detailed Site Investigation may be required.
- [Y]

[Y] i. Assessment of Environmental Effects

- [Y] An assessment of effects on the environment in accordance with Schedule 4 of the RMA, at a level of detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment. This assessment may require technical specialist reports on matters such as traffic, heritage, noise, protected trees, contaminated land, geotechnical assessment, landscape and urban design.

Note: This is a preliminary checklist only. It is general in nature and does not cover all rules in the District Plan, nor is all of the information relevant to all types of application. Please check with a planner at the Council if you are unsure of the information requirements for your particular application. Please also note that the detailed technical review of your application may reveal the need for you to supply further information, in which case you will be advised as soon as possible.



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**



R. W. Muir
Registrar-General
of Land

Search Copy

Identifier CB32B/1231
Land Registration District Canterbury
Date Issued September

Prior References

C K/

Estate Fee Simple
Area . hectares more or less
Legal Description Part Lot deposited Plan
Proprietors
Cloud Ocean Water Limited

Interests

. Easement Certificate specifying the following easements

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
rain water	Part Lot deposited Plan herein	Part herein	Lot deposited Plan CT	

The easements specified in Easement Certificate . are sub ect to Section () (a) Local Government ct

. Transfer creating the following easements in gross

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Right of way	Part Lot deposited Plan herein	P	The Christchurch rainage board	
Right of way	Part Lot deposited Plan herein	C P	The Christchurch rainage board	

The easements granted by Transfer . are sub ect to Section () (a) Local Government ct

. Transfer creating the following easements in gross

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
rain water	Part Lot deposited Plan herein	Part herein	The Christchurch rainage board	

The easements granted by Transfer . are sub ect to Section () (a) Local Government ct

Sub ect to water race easements created by Transfer

Sub ect to drainage easements created by Transfer

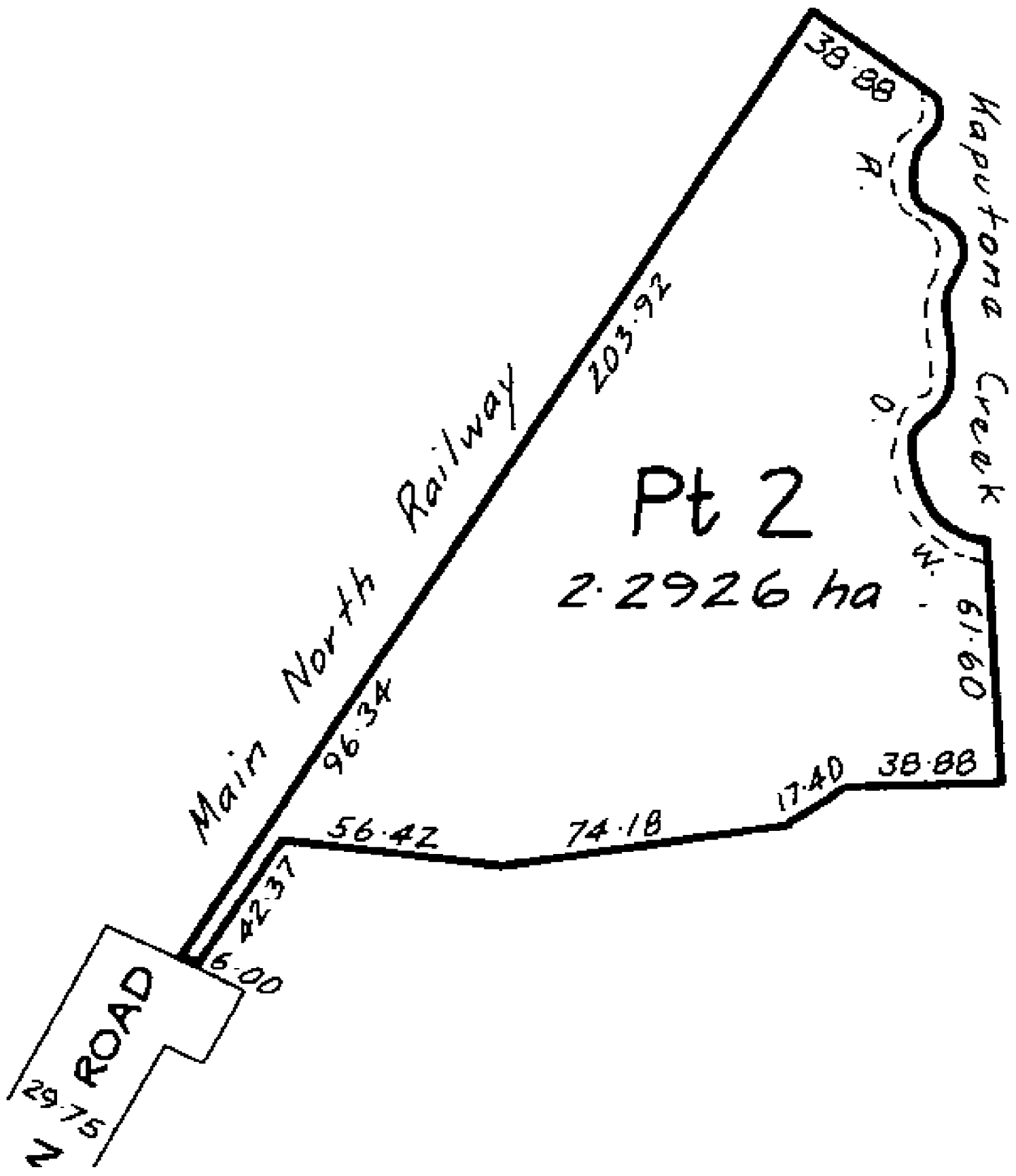
Sub ect to water race easements created by Transfer

Sub ect to drainage easements created by Transfer

ppurtenant hereto is a right to drain sewage created by Easement Instrument . . . at : pm

. Encumbrance to Cavalier Pool Holdings Limited . . . at : pm

. C E T ORION NE E L N LIMITE . . . at : pm



Dear Sir/Madam

Thank you for submitting your property enquiry in regards to our Listed Land Use Register (LLUR) which holds information about sites that have been used, or are currently used for activities which have the potential to have caused contamination.

The LLUR statement provided indicates the location of the land parcel(s) you enquired about and provides information regarding any LLUR sites within a radius specified in the statement of this land.

Please note that if a property is not currently entered on the LLUR, it does not mean that an activity with the potential to cause contamination has never occurred, or is not currently occurring there. The LLUR is not complete, and new sites are regularly being added as we receive information and conduct our own investigations into current and historic land uses.

The LLUR only contains information held by Environment Canterbury in relation to contaminated or potentially contaminated land; other information relevant to potential contamination may be held in other files (for example consent and enforcement files).

If your enquiry relates to a farm property, please note that many current and past activities undertaken on farms may not be listed on the LLUR. Activities such as the storage, formulation and disposal of pesticides, offal pits, foot rot troughs, animal dips and underground or above ground fuel tanks have the potential to cause contamination.

Please contact and Environment Canterbury Contaminated Sites Officer if you wish to discuss the contents of the LLUR statement, or if you require additional information. For any other information regarding this land please contact Environment Canterbury Customer Services.

Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

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

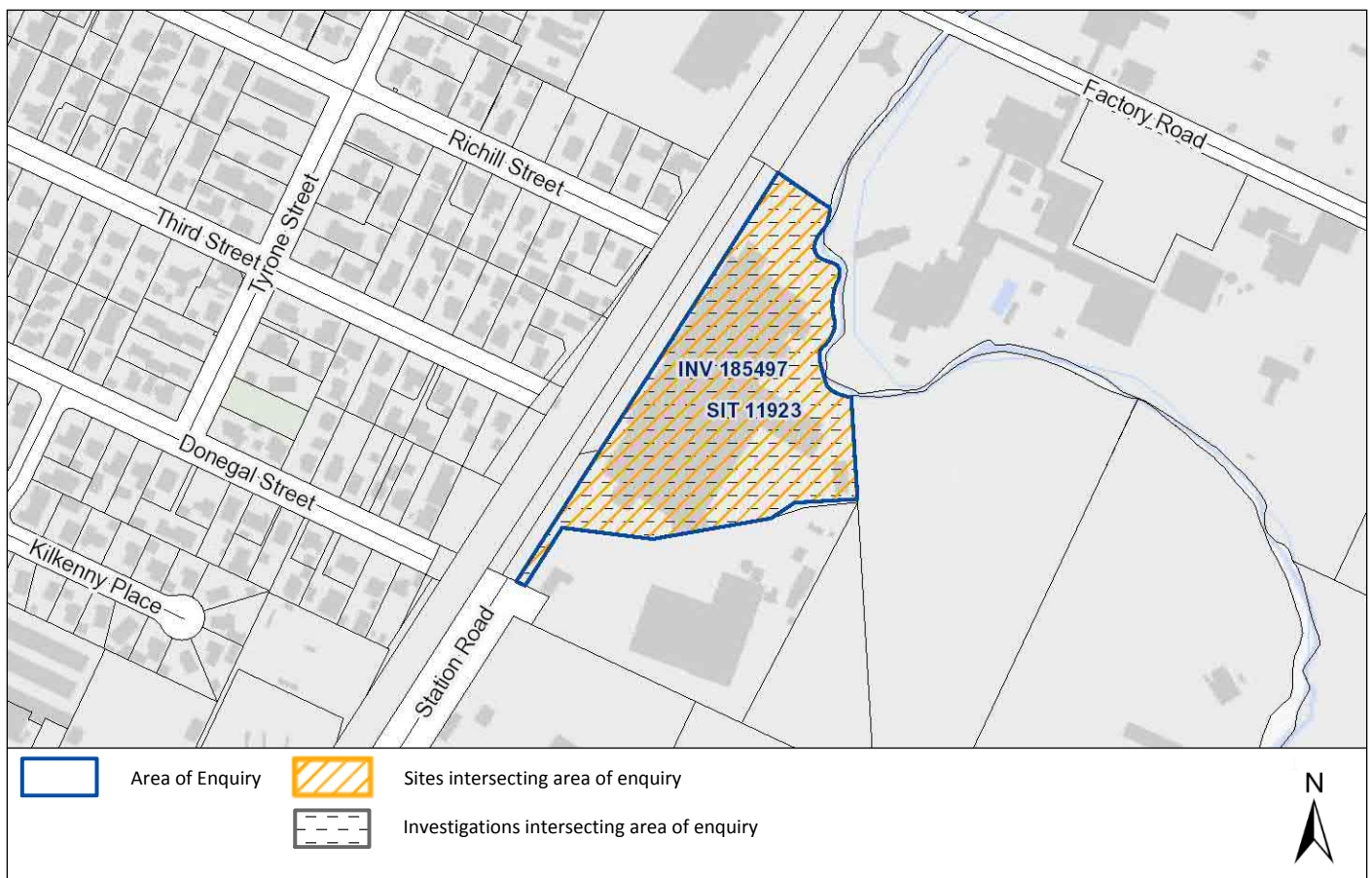
Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

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

www.ecan.govt.nz

Date:	14 December 2017	
Land Parcels:	Part Lot 2 DP 35966	Valuation No(s): 2180044650



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

Summary of sites:

Site ID	Site Name	Location	HAIL Activity(s)	Category
11923	Kaputone Wool Scour	20 Station Road, Belfast, Christchurch	A16 - Skin or wool processing; A17 - Storage tanks or drums for fuel, chemicals or liquid waste;	Review in Progress

Please note that the above table represents a summary of sites and HAILs intersecting the area of enquiry only.

Information held about the sites on the Listed Land Use Register

Site 11923: Kaputone Wool Scour (Intersects enquiry area.)

Site Address: 20 Station Road, Belfast, Christchurch

Legal Description(s): Part Lot 2 DP 35966

Site Category: Review in Progress

Definition: Investigation reports have been received and are currently being reviewed to determine the most appropriate site category.

Land Uses (from HAIL):	Period From	Period To	HAIL land use
	Unknown	Ongoing	Skin or wool processing including a tannery or fellmongery, or any other commercial facility for hide curing, drying, scouring or finishing or storing wool or leather products
	Unknown	Current	Storage tanks or drums for fuel, chemicals or liquid waste

Notes:

13 Jul 2012 CCC web map [accessed 13 July 2012] indicates 13,900 litre above ground diesel storage tank present [see TRIM record # C12C/72897].

Investigations:

16 Oct 2017 **INV 185497: 20 Station Rd - Contamination assessment letter report (Detailed Site Investigation)**
Kirk Roberts Consulting Engineers Limited

Summary of investigation(s):

Environment Canterbury has received a Detailed Site Investigation report that includes all or part of the property you have selected.

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

Information held about other investigations on the Listed Land Use Register

For further information from Environment Canterbury, contact Customer Services and refer to enquiry number ENQ187921.

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.

STRUCTURAL
GEOTECHNICAL
CIVIL
FIRE



SITE MANAGEMENT PLAN

20 STATION ROAD
BELFAST
CHRISTCHURCH

PREPARED FOR CLOUD OCEAN WATER LIMITED

JOB No. 1710455
DATE: 13/12/17
ISSUE: C

DOCUMENT CONTROL




Title	Site Management Plan	
Client	Cloud Ocean Water Limited – Attn. Soso Xiao	
Project Ref	1710455	
Version	C	
Status	FINAL	
Date	13 December 2017	
Prepared By	Name: James Jackson	Signature: 
Reviewed By	Name: James Creek	Signature: 
Authorised By	Name: Jordan Walker	Signature: 

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1 INTRODUCTION

1.1 Terms of Reference

Kirk Roberts Consulting Engineers (Kirk Roberts) have been engaged by Cloud Ocean Water Limited (the client) to prepare the following Site Management Plan (SMP) in connection with soil disturbance activities at 20 Station Road, Belfast, Christchurch (the site).

1.2 Context

It is understood the earthworks at the site are being undertaken as part of an upgrade to the power network, comprising the installation of new underground services, as well as the installation of a new drainage network.

Based on discussions with the client, it is understood that seven open trenches are to be excavated at separate locations around the perimeter of the site to enable new networks cables to be thrust through existing ducts, with one additional 50 x 1.2 x 1.0 m open trench line to be excavated in the eastern outdoor storage yard area to enable the installation of new power cables. It is estimated that approximately 120 m³ of soil is to be disturbed during the installation of the new power network.

It is also understood that a new drainage network is to be installed within the existing building footprint. Based on the depths of proposed excavations associated with the installation of the new drainage network, the client has advised that approximately 150 m³ of soil will be disturbed during these works.

On this basis, it is understood that a total of 270 m³ of soil is proposed to be disturbed at the site. The client has further advised Kirk Roberts that approximately 60 m³ of this soil, in an area previously identified as contaminated (see Section 2.1 below), is to be removed off site and disposal of at a landfill. All remaining excavated soils are understood to be re-used as backfill.

The site is registered on Environment Canterbury's (ECan) Listed Land Use Register (LLUR) in connection with potentially contaminating land use activities. Accordingly, the proposed soil disturbance activities are required to comply with the Ministry for the Environment (MfE) *National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012* (the NES).

Based on the proposed volumes of anticipated soil disturbance and subsequent discussions with the Christchurch City Council (CCC), it is understood the proposed soil disturbance activities will not comply with permitted activity regulations in the NES (Regulation 8(3)), and a resource consent is required for the soil disturbance works.

To satisfy the NES and resource consent requirements this SMP has been prepared.

1.3 Objectives of this plan

This Site Management Plan (SMP) has been developed to meet the requirements related to potential contamination issues associated with proposed earthworks on a site.

The principle purpose of this SMP is to provide a description of the minimum standards that must be complied with as well as best practices.

The SMP should be considered a living document as the project is advanced. If unforeseen conditions are encountered, this document should be re-evaluated and updated as required. This plan does not supersede any requirements established by the appointed contractor's own management plans.

2 SITE CONTAMINATION SUMMARY

The site is registered on ECan's LLUR in connection with potentially contaminating land use activities: Skin or wool processing (HAIL A16) and storage tanks for fuel (HAIL A17). The LLUR indicates that both potentially contaminating activities are currently ongoing, and that the site has not been subject to previous environmental investigations. Accordingly, the contamination status of site soils is currently unknown, and until future detailed environmental site investigations are undertaken on the site, the presence of the hazardous substances in site soils cannot be discounted. This SMP has been developed on the anticipation that site soils contain contaminants at concentrations which represent a risk to human health.

Based on the MfE's Hazardous Activities and Industrial List (HAIL), the following hazardous substances presented in Table 1 below are associated with the on-site activities, and are considered to potentially be present in site soils.

Table 1: On-site activities and associated potential contaminants

Activity	Hazardous substances
Skin or wool processing	Chromium, manganese, copper, ammonia, nitrite, sulphides, acids, sodium hydroxide, lime, formaldehyde, solvents, cyanide, detergents, pesticides and bleaching agents.
Storage tanks or drums for fuel	Wide range of chemicals (organic and inorganic), including petroleum hydrocarbons.

2.1 Kirk Roberts Previous Environmental Investigation

Kirk Roberts were previously engaged by the client to undertake a Detailed Site Investigation (DSI) at the site to support resource consent requirements, determine the contamination status of site soils, and assess the risks to human health in the context of the proposed development activities (Titled: "Detailed Site Investigation", KR Reference #:1710455, Dated: 12 December 2017, Rev. A) . A copy of the Kirk Roberts DSI report is provided in Appendix A of this SMP.

Kirk Roberts undertook soil sampling of fill material and underlying natural bedding in locations determined by the client, where open trenches are understood to be excavated to enable the installation of new underground services. Samples were analysed for pH, ammonia, cyanide, heavy metals, petroleum hydrocarbons and organochlorine pesticides (OCPs).

Two locations (TP104 and TP105) encountered soil contamination, with concentrations of arsenic between 90 – 500 mg/kg identified, in excess of human health guidelines considered protective of excavation and ground workers (80 mg/kg). Acidic soil conditions were also encountered in these locations. All remaining contaminant concentrations in these locations were either below the laboratory limits of detection or complied with relevant human health guidelines. All remaining test locations did not encountered contamination.

It is understood the client is to remove the contaminated soils within the vicinity of previous test locations TP104 and TP105 due to the risk of potential cable degradation associated with the identified acidic soil conditions.

The DSI only investigated six pre-determined locations within the outdoor storage yard area around the perimeter of the site. Additional earthworks are proposed in untested areas of the yard, and additional excavation works associated with the installation of a new drainage network are also proposed within the existing building footprints. These areas were not directly investigated in the previous DSI, and so the contamination status of these site soils is currently unknown. In the context of the long development history of the site, and as per the recommendations detailed in the DSI report, soils in untested locations should be treated as potentially contaminated during the earthworks, with environmental monitoring undertaken during the works to provide on-site assessments.

This SMP has also been developed to protect human health, principally earthworkers, in the context of the identified contamination, and the potential for further unidentified contamination.

3 MANAGEMENT PLAN

3.1 General

Arsenic contamination in excess of human health guidelines considered protective of construction workers has been identified in the eastern corner of the site. There is also an additional potential for contaminants to be present at concentrations which could pose a risk to human health in areas of the site previously not investigated. Identified receptors include ground/construction workers, current site users and environmental receptors. This section provides guidance on the minimum measures required to protect human health and the environment during future activities on the site that disturb contaminated, or potentially contaminated soils or groundwater. The measures are controls on subsurface works that will:

- Minimise worker and public contact with contaminated, or potentially contaminated soil;
- Ensure that contaminated, or potentially contaminated soil and groundwater are appropriately managed;
- Minimise the potential for excavated material to be spread on the site surface or migrate from the site through implementation of dust and erosion control measures;
- Minimise risk to local ecology.

3.2 Requirements for ground disturbance works

The following procedures will apply to all excavation works across the site.

Control of work areas

Full fencing of all areas of works including any soil stockpiles is to be maintained at all times during excavation works with controlled entry points. Visitors to the site will be advised of hazards relating to potentially contaminated material before being granted access to the excavation area. All contractors working on the site are required to attend a daily toolbox meeting to discuss hazards relating to daily planned project works.

Worker safety

Although any worker contact with contaminated, or potentially contaminated soil is expected to be relatively limited (as excavation will predominantly be undertaken using machinery) workers directly in contact with soil or potentially contaminated material from the site should wear appropriate personal protective equipment. Such equipment should include as a minimum:

- gloves;
- overalls;
- safety boots; and
- eye protection,

This will be addressed in the Health and Safety Plan prepared for the Project by the Contractor. Appropriate decontamination procedures, described below, should be followed.

Worker and Equipment Decontamination

The following procedures for worker and equipment decontamination should be followed for workers leaving the contaminated or potentially contaminated excavation areas, to minimise transport of contaminated material from the work area. Covered bins for disposal of equipment should be set up and washing areas shall be set up before works commence. The final procedures will be established by the contractor.

- Wash boots with detergent, water, brush and bucket, and rinse with clean water.
- Rinse goggles with clean water (if used).
- Discard disposal dust mask (if used) in disposal drum,
- Check filters and wash reusable dust masks (if used).
- Remove and dispose of overalls (if used).
- Wash hands and face.

Eating and drinking should only be allowed outside the work area and only after careful washing of hands and face with soap and water and removal of any soil from clothing.

Machinery and vehicle tyres and other tools that have been in contact with contaminated or potentially contaminated soil shall be brushed off or rinsed with clean water before leaving the contaminated area. Water will not be allowed to drain out of controlled areas and should be handled in accordance with this Plan. All bins containing disposable equipment and rubbish shall be disposed of at approved facilities.

4 STORMWATER / SEDIMENT CONTROL MANAGEMENT

In accordance with ECan requirements, any stormwater runoff from the site will need to be treated and managed prior to it being discharged to the receiving environment. In line with the “good practice” approach the principles behind Environment Canterbury’s “Erosion & Sediment Control Guidelines 2007” are described in the following section.

This will be achieved by constructing temporary diversion bunds and a vehicle wash-down area. All works are to be undertaken in general accordance with the Environment Canterbury Erosion and Sediment Control Guidelines¹.

4.1 Typical Control Measures

In line with Best Management Practices (BMPs) sediment management controls will typically include:

- Minimising the amount of disturbed soil;
- Control run-on water from flowing across the site and open earthworks areas, where practical;
- Separate clean run-off water from dirty water generated from commercial/industrial activities and disturbed or exposed ground;
- Avoid surface erosion by protecting exposed areas from overland run-off or effect of heavy rainfall events;
- Prevention of sediment from leaving the site by controlling discharge to stormwater drainage networks or adjacent waterways.
- Daily inspection of all control measure will be made of all implemented control measures to ensure they are in good working order in accordance with the BMP’s. Additionally, inspections will be made after each rainfall event.
- Any failure of control measures identified by the Engineer or contractor will require reporting of all maintenance concerns to the Engineer, with an instruction to the Contractor to give priority to any rectification works.

4.2 Stockpile management

Excavated materials which cannot be returned to the excavation will require sampling and laboratory analysis to assign the material to an appropriately licensed disposal facility and to more adequately characterise the contamination status of the stockpiled material. Any soils requiring off-site disposal will require to be temporarily stockpiled while awaiting laboratory analysis. Stockpiles will be created within designated areas separating contaminated and non-contaminated stockpiles. Material excavated from the areas of previous test locations TP104 and TP105 should be dealt with as contaminated, with further testing required. As the contamination status of the soils within the building footprint are unknown, stockpiles of these soils shall be kept separated from other soils onsite until laboratory analysis can occur. Any additional suspected contamination encountered during the

¹ Environment Canterbury, R06/23, Erosion and Sediment Control Guidelines 2007, A better way of managing earthworks and the environment.

earthworks should be stockpiled separately and subject to additional soil testing. The stockpiling areas shall be designated and set up prior to the stockpile being generated.

In order to mitigate any adverse effects from stockpiles located onsite, a comprehensive sediment management plan should be developed in accordance with the ECan "Erosion & Sediment Control Guidelines 2007" to avoid sediment runoff. The following steps should be undertaken to keep potential sources of sediment and other contaminants within the designated sediment control zone:

- Keep stockpiles and building materials off footpaths and road reserves;
- Keep stockpiles out of any existing or proposed public reserve areas;
- Keep all stockpiles within a sediment control zone behind a sediment barrier;
- Do not locate stockpiles in any overland flow path, or within 1 m of a hazard such as roadside water tables or stormwater inlets;
- Minimise soil loss, runoff and dust problems by covering stockpiles with waterproof covers such as geotextile fabric;
- Do not stockpile excessive volumes of loose soil material – limit the amount of that which is needed at any one time;
- Remove surplus material from site as soon as work is complete;
- Advise all site workers, subcontractors and delivery drivers of their responsibilities for responsible placement and management of materials;
- Where high winds coincide with dry weather, dust suppression measures will be extended to stockpiled soils including the use of sprinkler systems and hand held hoses.

Refer to the ECan "Erosion & Sediment Control Guidelines 2007" for more specific details regarding temporary stockpile management.

4.3 Maintenance / Inspection Procedures

The following are the inspection and maintenance procedures to be used to maintain the erosion and sediment controls:

- The Site Foremen will inspect all control measures at the end of each day. A daily "Sediment Control Inspection Sheet" shall be filled out to record the condition and performance of all control measures. At the end of the week the contractors Project Manager shall review the inspection sheets and confirm all necessary action or rectification works have been carried out. These forms will be kept on site at all times for Council staff to audit as necessary.
- Thorough inspections required following rain events with reporting on all action / improvements taken.
- The above inspection / review sheets will be made available to the Engineer or their representative for weekly verification purposes.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of inspection.
- Sediment fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground;
- Drainage channels and bunds will be inspected after each rainfall event and any breaches will be promptly repaired;
- Check effectiveness of site entry / exit points, shaker ramps and wheel wash arrangements.
- Temporary and permanent seeding and planting will be inspected for bare spots, washout, and healthy growth; and
- Any failure of these maintenance / inspection procedures identified by the Engineer will require reporting of all maintenance concerns by the Engineer, with an instruction to the Contractor to give priority to any rectification works.

The contractor will measure water clarity using a clarity tube and prepare records of dates and location of testing.

4.4 Dust and Odour Management

Contaminated dust may settle on surfaces on-site or off-site, presenting a potential risk to human health and ecological receptors. Dust must be minimised to the greatest extent possible in accordance with Environment Canterbury's Erosion and Sediment Control Guidelines 2007.

Impacts on air quality as a result of site works are a function of many factors including, but not limited to, the following:

- Time of year, which determines the moisture content of the soil and thus dust emission potential;
- The prevailing weather conditions, particularly temperature and wind speed;
- The location of earthworks- inside or outside;
- Magnitude or the size of the earthworks;
- Rate at which the earthworks are undertaken;
- Proximity of residents or sensitive receptors to the works; and
- The effectiveness of dust management controls.

Dust may be created during construction due to vehicle movement on unsealed roads and ground disturbing activities. Site personnel, the public, adjacent neighbours and the environment need to be protected from the effects of dust created during the works. The works shall be conducted, and dust suppression techniques shall be employed, such that there shall be no visible generation of dust. The site and open working areas used by machinery will be dampened down periodically to reduce dust generation. During the excavation works and any concrete cutting, including works within the buildings associated with the installation of a new drainage network, the following methods will be employed to minimise dust generation and distribution:

- Dampening the surface of the site and working area with hose or similar control;
- Protecting stockpiles/stored materials within sealed waste skips and / or wetting down the surface of the stockpile (if required);
- Ceasing work in strong winds; and
- Undertaking the loading or unloading of dry soil at the source to prevent the spread of loose material around the site.

Odours from contaminated soil are not anticipated, however in the event of accidental discovery of odorous contaminated materials, works in the area of the odorous materials shall cease and the contractor shall seek advice from a contaminated land practitioner. The contaminated land practitioner shall advise on health and safety requirements in response to the odorous materials. It may be necessary to replace material over the contaminated materials to reduce odour and to excavate in a manner that exposes a small area at a time, and allowing to ventilate before proceeding.

4.5 Water Supply

Where dust suppression is necessary, the Contractor shall gain water connection approval, if required, in order to utilise the available water resource.

5 CONTAMINATION DISCOVERY

Kirk Roberts' previous DSI investigated six locations where open trenches are understood to be excavated to enable new network cables to be thrust through existing ducts. In addition to these proposed works, the client is also proposing to excavate two additional trenches of 10 m and 50 m x 1.0 x 1.0 m to install new power cables, and also install a new drainage network primarily within the existing building. On this basis, large areas of the proposed soil disturbance activities have not been investigated, and the contamination status of site soils in these locations are unknown. Based on the findings of the DSI and associated desk study assessment, it is considered site soils in these locations may contain contaminants in concentrations which could pose a risk to human health. Accordingly, soils in these locations should be treated as potentially contaminated during the earthworks.

If unexpected contaminated or potentially contaminated materials are discovered during the earthworks, works must be stopped in the area of contamination. This is particularly important if material that may contain asbestos is encountered. Contamination discoveries also include unusual odours, unusual soil colouring, oily substances, or fibrous materials.

If newly discovered contaminated material is encountered it must be covered and protected from stormwater run-on and run-off. If it has been removed from the excavation already it shall be placed on plastic sheeting. The site manager will consult with a contaminated land practitioner to evaluate the material and determine the appropriate disposal location and any other action required.

Should asbestos be observed or suspected during the excavation works, all work shall cease and Guidelines for the Management and Removal of Asbestos (revised 1999) for the Department of Labour, and the Health & Safety in Employment (Asbestos) Regulations (1998) will be followed. Works can recommence once all asbestos has been safely managed. Any such asbestos works (assessment, delineation, removal and verification) shall be undertaken by a specialist asbestos contractor.

6 ON-SITE ENVIRONMENTAL MONITORING

As per the recommendations in Kirk Roberts' previous DSI report, on-site environmental monitoring should be undertaken during the soil disturbance activities by a suitably qualified and experienced environmental practitioner, primarily during the earthwork activities within the warehousing.

Given the potential for unidentified contamination to be present in materials underlying the existing buildings, the presence of an environmental practitioner during the earthworks will enable the identification of contaminated soils, and enable immediate soil sampling to be undertaken to aid disposal guidance.

7 CONSTRUCTION NOISE AND VIBRATION

Construction noise will be short term and typical of a confined construction operation. Mitigation measures to be undertaken in respect to construction noise will be in the form of defined hours of site operation, with noise not exceeding the standard set in NZS 6803:1999 'Acoustics – Construction Noise.'

No blasting or other significantly disruptive earthworks (e.g. rock breaking) will occur on site, and no adverse effects from vibration are expected.

8 FUEL CONTAINMENT

Where on-site refuelling of site vehicles and machinery is required, this shall be either direct from diesel tankers, mobile tanks (towed) or possibly from static diesel storage tanks sited at strategic locations within the site. Industry best practice should be used during refuelling to ensure spillage to site soils is eliminated, and should only be undertaken by or under the supervision of a suitably qualified operator.

9 WASTE SOIL CLASSIFICATION AND DISPOSAL

During excavations works on site, soils requiring to be removed off site will be temporarily stockpiled as per the management controls detailed within this SMP, and sampled and analysed to identify potential contaminant concentrations prior to disposal to ensure soils are disposed of to the correct landfill. Where required, soil sampling shall be undertaken by a suitably qualified and experienced contaminated land practitioner (SQEP), in accordance with the Ministry for the Environment Contaminated Land Management Guidelines No. 5, and shall be collected using the following procedure:

- A minimum of three soil samples per soil type will be collected to characterise the material (as a minimum). In the event that the excavated material is non-homogeneous, sufficient samples shall be collected to characterise the material, at the discretion of the contaminated land practitioner.
- Soil samples shall be collected in accordance with best practise, using freshly gloved hands, or other appropriate method if collected from in situ soil and shall be placed into laboratory supplied sample containers.
- Any equipment used to collect samples shall be decontaminated between samples.
- Samples shall be shipped to an accredited laboratory, under chain of custody documentation.

The contaminated land practitioner shall report the results of the testing to the client as soon as they are received and provide advice on the appropriate location for use and/or disposal of the soil. All loads leaving the site for contaminated soil landfill shall have a tracking document signed out of the site and collected at the landfill, to track each load of material.

Although limited soil sampling has been undertaken as part of the previous Kirk Roberts DSI, additional soil sampling of surplus soils is required to confirm appropriate disposal facilities. Soil disposal locations will be dependent on the level of contaminant concentrations identified within soil excavated on site, and the following definitions may be applied following laboratory analysis:

Cleanfill

The definition of 'cleanfill' is defined by MfE (2002a) as:

"Material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:

- Combustible, putrescible, degradable or leachable components.
- Hazardous substances.
- Products or materials derived from hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices.
- Materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances.
- Liquid waste.

Managed fill

Managed fill comprises:

- Soil containing metal contaminants above regional background concentrations.
- Soil containing detectable concentrations of hydrocarbon compounds.
- Soil containing contaminants of concern above ecological risk based guideline values.
- Soil that does not contain hazardous substances or materials in the form of household and industrial waste, organic waste or asbestos containing material.
- Soils which meet the recreational guideline screening criteria as set out within the NES.

Contaminated fill

Contaminated fill in the context of this assessment constitutes:

- Hazardous materials in the form of household and industrial waste, organic waste or asbestos containing material.
- Soil with contamination present above human health guideline values.

10 COMPLAINTS

The following procedure shall be followed for all construction related complaints:

- All dust complaints should be immediately directed to the nominated Site Foremen and the complaints procedure will be implemented. These complaints will then be forwarded to the nominated Project Manager, as appropriate.
- Complaints will be recorded on a complaints register prepared by the contractor. This will record the nature of the complaint and time received.
- An initial response will be made and depending on the nature of the complaint. If conditions are significant, consideration will be given to ceasing the activity until mitigation measures are implemented or weather conditions become suitable. It will then be determined the best practicable solution to reduce the irritant level. This may involve additional screens around plant, changing methodology or changing the item of plant used. However, in some cases it might not be practicable to provide immediate relief. The complainant will be informed of actions taken.
- Where the initial response does not address the complaint, further investigation, corrective action and follow-up monitoring shall be undertaken as appropriate. The complainant will be informed of actions taken.
- All actions taken to rectify the problem are to be recorded on the Complaints register, and the complaint will then be closed.
- Significant complaints/incidents will be discussed at the weekly progress meeting.

11 REPORTING

The contractor shall maintain the following records:

- All weighbridge docketts
- Copies of all landfill disposal docketts
- Copies of records of disposal of any wastewater offsite
- Details of the date, time and nature of any complaints made about the works.

A report will be required using this information and will have to be provided to Christchurch City Council at the completion of the excavation works. The report should contain confirmation of the final location of any excavated material including disposal and re-use.

Kirk Roberts is available to undertake the on-site sampling, monitoring and reporting should the client request.

12 CONSULTATION

12.1 Local Authorities

Communication between the contractor and both Christchurch City Council and Environment Canterbury Regional Council is to be regular and ongoing through the development of the site.

APPENDIX A

- Previous Kirk Roberts Consulting Engineers Detailed Site Investigation Report (Dated: 12.12.17)



DETAILED SITE INVESTIGATION

Cloud Ocean Water Ltd

20 Station Road
Belfast
Christchurch

Prepared for Cloud Ocean Water Limited

JOB No. 1710455
DATE: 12/12/17
ISSUE: A

QUALITY CONTROL

Title 20 Station Road – Detailed Site Investigation

Client Cloud Ocean Water Ltd

Filename 1710455

Issue A

Date 12 December 2017

Prepared By **Name:** James Jackson
MESci Geology

Signature:



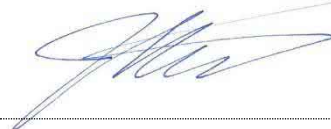
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Executive Manager –
Geotechnical/Environmental/Civil
BScGE, CPEng, MIPENZ, IntPE(NZ)

Signature:



Limitations

This report has been prepared for Cloud Ocean Water Ltd in connection with a DSI at 20 Station Road, Belfast, Christchurch. No liability is accepted by this company or any employee of this company with respect to its intended use by any other person or persons.

This report provides an assessment of the potential contamination status of the ground below the site based on the available information. Kirk Roberts Consulting Engineers Ltd obtained, reviewed and evaluated information in preparing this report from the Client, Environment Canterbury and others. Kirk Robert's opinions, conclusions and recommendations are based upon this information. Kirk Roberts does not warrant the accuracy of the information provided to it and will not be responsible for any opinions which Kirk Roberts has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate. All conclusions made within this report are based on discrete sample positions without extensive sampling and analysis contamination cannot be confirmed or refuted. Where additional sampling and analysis (or similar) is recommended in this report, it should not be inferred that the site is contaminated or presents a risk to human health or the environment. Analogously, when no additional action is recommended, it should not be inferred that the site is free of contamination. Kirk Roberts' does not warrant or guarantee that the site is free of hazardous or potentially hazardous materials or conditions.

This PSI assessment has been produced in accordance with the principals of The Ministry for the Environments National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 and the Contaminated Land Management Guidelines. However, although this assessment may make reference to environmental and ecological issues, this report does not constitute an environmental or ecological assessment. Any information, guidance or recommendations made during this report regarding these matters are for informative use only, and are intended for benefit of the client only.

This report is only valid for the proposal as outlined in the introduction and the information and interpretation of the content in this report may not be relevant if the proposed development is altered in any way.

If the recipient of this report wishes to contact Kirk Roberts Consulting Engineers Ltd, either Email: info@kirkroberts.co.nz or Phone: 03 379 8600.

EXECUTIVE SUMMARY

20 Station Road, in Belfast, Christchurch, previously functioning as the Kaputone Wool Scour facility, is proposed for redevelopment into a water bottling plant. It is understood that as part of these works the client is upgrading the underground power and drainage network within both the existing warehouses and across the outdoor storage yard areas. Soil disturbance activities are therefore proposed across the site during the redevelopment works.

The site is registered on Environment Canterbury's (ECan) Listed Land Use Register (LLUR) in connection with potentially contaminating land use activities, specifically relating to skin or wool processing (HAIL A16) and storage tanks for fuel (HAIL A17). Accordingly, the proposed soil disturbance activities are required to comply with the Ministry for the Environment (MfE) National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (the NES).

Based on information provided by the client, it is understood that a total of approximately 270 m³ of soil disturbance is proposed at the site as part of the upgrade to the underground service and drainage network. On the basis that volumes of soil disturbance exceed permitted volumes specified in Regulation 8(3) of the NES, a resource consent is required for the proposed earthworks.

Following a review of available information, including historical aerial photographs and information held by the Christchurch City Council (CCC), the site has had a long development history, with the earliest available photography in 1940 identifying the southern half of the site as developed with warehouses. Since circa. 1940 to at least 1970, the majority of the site surface appeared unsealed, with evidence of outdoor storage and possible earthwork / landfilling activities having occurred in the easternmost region of the site. Any potentially contaminative activities undertaken during this period are considered to have been at a high risk of contaminating underlying soils due to the absence of an impervious protective hardstand seal.

On this basis, and in the context of more recent potentially contaminating land use activities associated with the Kaputone Wool Scour facility, site soils were considered potentially contaminated, with a potential risk to human health identified in the context of the proposed earthworks. As such, and in accordance with NES regulations, a Detailed Site Investigation (DSI) has been undertaken to assess potential on-site contamination, assess potential risks to human health, and to determine the compliance of the development activity with NESCS regulations.

Kirk Roberts's site investigation, undertaken on the 26th September 2017, comprised the advancement of machine excavated test pits to up to 1.5 m below ground level (bgl) at six locations determined by the client in areas of proposed earthworks. Soil samples were collected from shallow fill and underlying soils, and analysed for potential contaminants based on the findings of the desktop study.

Following laboratory analysis, two test locations (TP104 and TP105) in the eastern region of the site encountered soil contamination, with concentrations of arsenic between 90 – 500 mg/kg identified in excess of human health guidelines considered protective of excavation and ground workers. Detectable concentrations of petroleum hydrocarbons and acidic soil conditions were also encountered in these locations. Soils in these locations are therefore considered contaminated, and additionally unsuitable for backfilling. All remaining test locations complied with relevant human health guidance criteria, with no contamination identified.

A conceptual site model has identified that a risk to human health is present in the eastern region of the site, principally associated with maintenance / earthworkers during the proposed soil disturbance activities. Future site users are not considered to be at risk on the basis that excavations are understood to be reinstated and sealed

following the installation works, thereby removing any exposure pathway between remaining contaminated soils and site users.

Large areas of the site also proposed for soil disturbance activities have not been assessed as part of this investigation, principally within the existing warehouses. It is recommended that environmental monitoring is undertaken during the soil disturbance activities by a suitably qualified environmental practitioner. The purpose of undertaking monitoring during the earthworks is to enable the identification of contaminated, or potentially contaminated soils unsuitable for backfilling.

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1 INTRODUCTION

1.1 Terms of Reference

Kirk Roberts Consulting Engineers Ltd (Kirk Roberts) have been engaged by Cloud Ocean Water Limited (the client) to provide a Detailed Site Investigation (DSI) at 20 Station Road, in Belfast, Christchurch (the site) to support a resource consent application in connection with proposed soil disturbance activities.

1.2 Context and Purpose

It is understood the soil disturbance activities at the site are being undertaken as part of an upgrade to the underground power and drainage network.

The site is registered on Environment Canterbury's (ECan) Listed Land Use Register (LLUR) in connection with an industry described in the current edition of the Hazardous Activities and Industries List¹ (HAIL) as described in *The Ministry for the Environment National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012*² (hereafter referred to as the "NESCS"). The LLUR indicates skin wool processing (HAIL A16) and fuel / liquid waste storage (HAIL A17) are currently undertaken on the site.

Based on information provided by the client, it is understood that a total of approximately 270 m³ of soil disturbance is proposed at the site as part of the upgrade to the underground service and drainage network. On the basis that volumes of soil disturbance exceeded permitted volumes specified in Regulation 8(3) of the NES, a resource consent is required for the proposed earthworks.

As such, and in accordance with NESCS regulations, this Detailed Site Investigation (DSI) has been completed to support resource consent requirements, to investigate potential soil contamination underlying the site, to determine the potential risks to human health in the context of the proposed works, and to assess the compliance of the soil disturbance activities with NESCS regulations.

1.3 Scope of Works

The following scope of works has been undertaken in accordance with MfE Contaminated Land Management Guidelines 2016 (CLMG) and NESCS legislation requirements:

- Review the geological and hydrological setting of the site;
- Desktop review of historical sources, including aerial photography and council documentation;
- Review Environment Canterbury (ECan) Listed Land Use Register (LLUR);
- Development of a soil sampling exercise to target potential on-site contamination;
- Retrieval of soil samples for chemical analysis;
- Complete a Conceptual Site Model (CSM) and identify potential source-pathway-receptor relationships;
- Assess the compliance of the proposed activities with NESCS guidance;
- Provide guidance regarding off-site disposal options; and
- Provide recommendations in the context of future development plans.

1.4 Proposed Earthworks

It is understood the site is being redeveloped into a water bottling plant facility, with groundwater being drawn from underlying aquifers for commercial sale. As part of these redevelopment works, the client is upgrading the power network, comprising the installation of new underground services, and installing a new drainage network.

The client has stated that as part of the upgrade to the existing power network, seven open trenches of 10 x 0.9 x 0.9 m are to be excavated at separate locations around the perimeter of the site to enable new networks cables to be thrust through existing ducts. Additionally, one 50 x 1.2 x 1.0 m open trench line is to be excavated in the eastern outdoor storage yard area to enable the installation of new power cables. It is estimated that approximately 120 m³ of soil is to be disturbed during the installation of the new power network in the outdoor storage yard areas.

It is also understood that a new drainage network is to be installed predominantly within the existing building footprint to increase the site's capacity for managing and disposing wastewater associated with the new use at the site. Based on the depths of proposed excavations associated with the installation of the new drainage network, the client has advised that approximately 150 m³ of soil will be disturbed during these works.

On this basis, it is understood that a total of 270 m³ of soil is proposed to be disturbed at the site, from both within the existing warehousing / buildings and in the outdoor storage yard area.

2 SITE SETTING & ENVIRONMENTAL DETAILS

2.1 Site Identification

Information regarding the identification is provided in Table 1 and the site location plan is shown as Figure 2.1.

Item	Description
Address	20 Station Road, Belfast, Christchurch
Legal Description	Part Lot 2 DP 35966
Valuation Number	2180044650
Coordinates	1,570,782.940451 5,189,392.690896 Meters
Site Area	2.28 ha
Territorial Authority	Christchurch City Council
Land Use Zone	Industrial Heavy Zone
Current Site Use	Industrial – Kaputone Wool Scour facility

Table 1: Site Information



Figure 2.1: The latest aerial photo of 20 Station Road, with a red outline used to show the approximate boundary (Source: ECan GIS Mapping).

2.2 Site Setting

The site setting is summarised below in Table 2.

Item	Description
Site Description	The site, comprises an irregular shaped parcel of land located at the end of Station Road, in Belfast, Christchurch, approximately 270 m north of the intersection with Belfast Road. The site currently contains approximately 10,500 m ² of building consisting predominantly of warehousing, with surrounding outdoor asphalt-sealed yard areas to the south and east, with gravel hardstand storage yard area in the north.
Surrounding Area	The site is located within an area of mixed use. Surrounding land uses are as follows: <ul style="list-style-type: none"> • North – Small stream (Kaputone Creek), with commercial development beyond. • East – Undeveloped land. • South – Industrial development. • West – Kiwi Railway line adjacent to site boundary, with residential developments beyond.
Topography	The site is predominantly flat and level in accordance with the local topography.
Geology³	A review of published geology on the Geological and Nuclear Science website (Data.gns.cri.nz) was undertaken and identified that the site is underlain by Holocene river deposits consisting of modern river floodplain low level degradation terrace, weathered variably sorted gravel, sand, silt and silty clays.
Hydrology	The Kaputone Creek borders the northeastern site boundary. No other surface water features are location within 500 m of the site.
Hydrogeology⁴	A review of Canterbury online groundwater mapping identifies that: <ul style="list-style-type: none"> • The site is underlain by a coastal confined gravel aquifer system; • Groundwater is anticipated to generally flow from west to east, however locally differing hydraulic gradients may be expected within the vicinity of the adjacent Kaputone Creek; • The site is located approximately 570 m southeast of a Community Drinking Water Protection Zone; and • Groundwater is anticipated approximately 2.0 m bgl.

Table 2: Site Setting

3 SITE HISTORY AND RECORD SEARCH

3.1 Historical Aerial Photographs

A review of available historical aerial photographs on Canterbury Maps⁴ and Google Earth⁶ was undertaken, and a summary of the site history and surrounding area is presented in Table 3 below. All aerial photographs reviewed are provided in Appendix A.

Aerial Photo	Site	Adjacent
1940 – 1944	From the earliest available historical photograph, the site comprises a large warehousing in the approximate location of the present-day buildings (buildings are not related to the present-day development). The majority of the site surface appears to comprise unsealed grassed / undeveloped land, with small roadways and possible outdoor storage immediately north of the buildings.	Undeveloped land to the north, east and south, with residential developments to the west.
1955 – 1959	The existing site developments appear to have had extension works, with two additional warehousing units to the north and south. The site surface appears to remain unsealed.	KiwiRail line, bordering the western site boundary, has been established.
1960 – 1964	Continued extension work on existing site developments. Clearer image resolution confirms site surface is unsealed, appearing grassed. Possible earthworks and / or outdoor storage in the eastern area of the site, with the site surface appearing to have been disturbed.	No significant changes to the surrounding area with the exception of a possible residential dwelling to the northeast of the site, and continued intensification of residential developments to the west.
1970 – 1974	Additional adjoining warehouse constructed to the north of previous warehousing (this unit remains to existing day). Site surface immediately surrounding the buildings now appeared to comprise hardstand. Northern and easternmost regions of the site still unsealed. Possible outdoor storage area in the southeastern corner of the site.	No significant change with the exception of the previous residential dwelling immediately north now removed.
1975 – 1979	No significant or noticeable change.	No significant or noticeable change.
1980 – 1984	The site has undergone significant development, with the majority of the present-day warehousing units now developed. A number of the previous buildings have been demolished and removed, with the larger units	Residential developments to the west now appear fully established, the commercial / industrial development immediately south of the site now developed, and commercial properties to the northeast under construction. The

	still remaining. Larger areas of the site surface now appear sealed.	property to the south appears to have large area of outdoor storage immediately south of the subject site.
1990 – 1994	No significant or noticeable change.	Commercial developments to the northeast now established.
2000 – 2000	The site now appears to largely reflect the present-day layout.	The surrounding area now appears to largely reflect the present day.

Table 3: Summary of historical aerial photography

3.2 Bore Consent Search

ECan GIS mapping indicates 53 wells are located within 500 m of the subject site, relating to:

- 13 active wells: eleven for commercial / industrial use, one for water level observation purposes, and one used for firefighting purposes. With the exception of the ground water level monitoring well, all active wells are advanced to depths of between 15.0 and 90.0 m bgl;
- 35 inactive / infilled geotechnical bores;
- Three inactive wells previously used for commercial purposes;

Two wells are located on site; and relate to:

- One active well used (M35/1577) for commercial / industrial purposes and is owned by Kaputone Wool Scour Ltd. The well is advanced to a depth of 33.10 m bgl and is installed within the Riccarton Gravel aquifer; and
- One proposed well (BX24/1577) registered to Cloud Ocean Water Ltd.

3.3 Resource Consent Search

A review of resource consents held by ECan within a 500m radius of the site was undertaken on the Canterbury Maps website (Canterburymaps.govt.nz). The search identified 17 active resource consents, which are summarised as follows:

- Ten active discharge permits: One discharge effluent to land, five discharges of contaminants (combustion products) to air, two discharge permits of contaminants (stormwater) into the Kaputone Stream, and one discharge of water (machine and refrigerant condenser coolant) to the Kaputone Stream.
- One land use consent associated with the installation of a 10,000 L above ground diesel storage tank at 44 Belfast Road;
- Five water permits, including one associated with the take and use of water from the Kaputone Stream, one associated with damming water in the Kaputone Stream, and three associated with the take and use of groundwater.

Five resource consents are located on site, including four active consents relating to:

- Discharge of contaminants (sulphur oxides, carbon dioxide, nitrogen oxides, smoke, particulates and odorous components) to air from the incineration of concentration woollscour liquor, combustion of coal and scouring of greasy wool. Registered to Kaputone Wool Scour Ltd;
- Discharge of agricultural product processing wastewater to land; and
- Installation of a bore (BX24/1577).

One resource consent with the application waiting is also located on the subject site relating to the take and use of groundwater (CRC182813).

3.4 ECan Listed Land Use Register

A review of the ECan Listed Land Use Register (LLUR) was undertaken on the LLUR.ecan.govt.nz website. The LLUR is a register of sites which have had potentially contaminating activities undertaken as defined by the Hazardous Activities and Industries List (HAIL) in the NES.

The ECan LLUR contains the following records of Hazardous and Industries List⁷ (HAIL) activities known to have occurred at the site.

Period From	Period To	HAIL Land Use	LLUR Category
Unknown	Ongoing	A16 – Skin or wool processing A17 – Storage tanks or drums for fuel, chemicals or liquid waste.	Not investigated.

Table 4: Summary of LLUR Information

The LLUR report states a 13,900 L above ground diesel storage tank is present.

4 SITE INSPECTION

Table 5 below summarizes the conditions of the site and relevant features identified during the site inspection undertaken on 26th September 2017.

Site Condition	Comments
Visual signs of contamination	No visible signs of contamination, including waste product, discoloration, surface staining, vegetation bare patches, etc. were encountered on-site or along site boundaries.
Current land use and site condition	<p>The majority of the central and western areas of the site comprise warehouse and office units. The warehouses generally comprise either brick and corrugated iron construction or precast concrete panels, with an additional wooden shed used for storage purposes located in the eastern most corner of the site.</p> <p>The outdoor areas in the southern and eastern regions are asphalt-sealed, with the northern outdoor area comprising gravel hardstand, with patches of loose / broken asphalt. A small area of unsealed grass land was located in the eastern corner of the site adjacent to the wooden shed area.</p> <p>The above ground storage tank (AST) was identified immediately east of the buildings adjacent to an access way joining the southern and northern outdoor storage yard areas. The site appeared in good condition, with no visual evidence of spilling identified.</p>

	Areas of outdoor storage were noted in both the northernmost regions of the site, and in the eastern corner adjacent to the wooden shed area upon an area of unsealed grassed covered land. Storage in the eastern region adjacent to the small outdoor shed structure predominantly comprises timber and miscellaneous steel items, including piping and scaffold. In the northernmost corner of the site an area used for coal storage was identified, with additional areas storing timber and metal.
Local sensitive environments	The adjacent Kaputone Stream is considered the only local sensitive environment.
Additional observations	No visible signs of plant stress were identified.

Table 5: Summary of the Site Walkover

5 SUMMARY OF POTENTIALLY CONTAMINATING ACTIVITIES

Based on the information reviewed, including historical aerial photographs and information held by the Christchurch City Council (CCC), the site has had a long development history, with the earliest available photography in 1940 identifying the southern half of the site was developed. Although information regarding this previous site development is not known, the site development, comprising warehousing, appears commercial and/or industrial in nature.

Since circa. 1940 to at least 1970, the majority of the site surface appeared unsealed, with evidence of outdoor storage and possible earthwork / landfilling activities having occurred in the eastern most region of the site. Any potentially contaminative activities undertaken during this period are considered to have been at a high risk of contaminating underlying soils due to the absence of an impervious protective hardstand seal.

More recently, since approximately 1980 – 1990s, the site appears to have been developed as per the present-day layout, with the site functioning as the Kaputone Wool Scour plant. This land use comprised the cleaning, treatment and processing of wool product.

The site is registered on ECan's LLUR in connection with skin or wool processing (HAIL A16) and storage tanks for fuel (HAIL A17). The LLUR indicates that both potentially contaminating activities are currently ongoing, and that the site has not been subject to previous environmental investigations. Accordingly, the contamination status of site soils is currently unknown.

Based on the MfE's Hazardous Activities and Industrial List (HAIL), the following hazardous substances presented in Table 6 below are associated with the on-site activities, and are considered to potentially be present in site soils.

Table 6: On-site activities and associated potential contaminants

Activity	Hazardous substances
Skin or wool processing	Chromium, manganese, copper, ammonia, nitrite, sulphides, acids, sodium hydroxide, line, formaldehyde, solvents, cyanide, detergents, pesticides and bleaching agents.
Storage tanks or drums for fuel	Wide range of chemicals (organic and inorganic), including petroleum hydrocarbons.
Demolition of Historical Buildings	Asbestos, Heavy Metals

On this basis, site soils within the proposed soil disturbance area may contain contamination from historical land use activities. As such, an intrusive investigation is required to further investigate prior to future development activities.

6 DETAILED SITE INVESTIGATION

Based on the desktop assessment, site soils are deemed to potentially contain contaminants at concentrations which could cause risk to human health and the environment during the proposed soil disturbance activities.

As a potential risk to human health and the environment was identified during the desk top assessment, a Detailed Site Investigation (DSI) is required to assess potential on-site contamination, assess potential risks to human health, and to determine the compliance of the development activity with NESCS regulations.

6.1 Soil Sampling and Testing Rationale

In the context of the proposed soil disturbance activities, earthworks are proposed both in the outdoor storage yard areas, and also within the existing buildings. On the basis that maintenance / excavation workers are deemed the primary receptor to potential soil contamination (i.e. the site surface is understood to be re-instated and sealed following the installation of new services and thereby reducing risks of exposure to future site users), the environmental sampling was focused on areas of the site where soil disturbance works were proposed.

Due to constraints and impracticalities associated with the sampling of soil underlying the existing warehouse where the proposed drainage network is to be installed (i.e. the presence of concrete slabs which would require breaking, together with on going site activities and related hazards associated with undertaking intrusive investigations within an active workplace), this DSI did not comprise the collection and analysis of soil samples within the on-site buildings. Instead, for more practical means, and as discussed in Section 10 below, future environmental monitoring and soil sampling is recommended in these areas to assess these soils within the building footprint during the time of the excavation works.

As such, soil sampling was undertaken in the outdoor areas only. Based on information provided by the client, it is understood that seven open trenches are to be excavated at separate locations around the perimeter of the site, to enable network cables to be thrust through existing ducts. Accordingly, Kirk Roberts undertook a site investigation to assess the contamination status of site soils in these locations only.

Samples were collected in shallow fill material and underlying natural bedding from machine excavated test pits. The client advised that the open trenches in these locations would be up to 1.0 m deep, and so test pits were advanced up to 1.5 m bgl, with samples retrieved and analysed within this soil profile.

On the basis of the potential contaminants associated with historical activities in that area of the site, samples were selected for analysis of the following test suite: heavy metals, organochlorine pesticides (OCPs), total petroleum hydrocarbons (TPH), ammonia, total cyanide, and pH.

Samples for asbestos presence analysis was not undertaken in samples retrieved from these areas, on the basis that asbestos contamination is only suspected in areas of the site which contained the historical on-site buildings (ie under the existing warehouse floor).

6.2 Methodology, Field Quality Assurance and Quality Control (QA/QC)

The investigation and soil sampling undertaken is outlined below:

- Collection of soil samples from machine excavated test pits by a qualified and experienced field engineer;
- Soil samples were collected with a new pair of nitrile gloves and were placed directly into laboratory supplied containers using a disposable nitrile gloved hand and labelled with depth, date, time and sample number;
- Visual and olfactory evidence of contamination of each sample recorded;
- Samples were placed into a 'chilly bin' and transported to IANZ (International Academy of New Zealand) accredited Analytica Laboratories for analysis for pH, ammonia, cyanide, heavy metals, petroleum hydrocarbons and organochlorine pesticides (OCPs).

6.3 Intrusive Sampling Observations

Kirk Roberts's site investigation, undertaken on the 26th September 2017, comprised the advancement of machine excavated test pits to up to 1.5 m below ground level (bgl). The client was only able to identify six of the seven proposed trench locations, as such the Kirk Roberts' investigation comprises six test pit locations (TP101 – TP106). A soil test location plan is provided in Appendix B.

With the exception of TP104 and TP105 located within the southeastern area of the site, the investigation encountered relatively uniform soil conditions.

Underlying surficial layers of asphalt and underlying sandy gravel fill subgrade material, a bluish grey silt to the final test depths of 1.5 m bgl was encountered. In TP104 and TP105, however, organic silt and peaty material was encountered under surficial layers of topsoil and/or fill material. An underlying grey silt was then encountered from 1.0 m and 1.5m bgl in TP104 and TP105, respectively.

The test pit logs are provided in Appendix B.

No visual evidence of contamination was noted within any soil samples collected from the site, however a strong organic odour was noted within test pit locations TP104 and TP105.

6.4 Assessment Criteria

Soil samples collected were compared to the following human health and environmental guidelines to identify relevant human health and environmental trigger levels:

- National Environment Standards for assessing and managing contaminants in soil to protect human health, 2012, Tables B2 and B3, Commercial land use, and Recreational landuse for landfill disposal guidance.
- Background concentrations of trace elements characteristic of the Recent soils typical of this region *Canterbury Regional Council Background Concentrations of Selected Trace Elements in Canterbury Soils*¹¹.

Where a contaminant targeted in this investigation is not included in the priority contaminants covered by the NES, guideline screening values have been selected in accordance with MfE *Contaminated Land Management Guidelines No.2: Hierarchy and Application of Environmental Guideline Value*⁹.

6.5 Laboratory Results

A results summary table is presented in Table 7 which shows the target soil contaminant concentrations in the samples tested compared to the investigation criteria outlined in Section 6.4.

Concentrations of OCPs and cyanide were below the laboratory limits of detection in all samples, and only trace concentrations of DDT were encountered in two test locations (TP104 and TP105). The concentrations of these contaminants have been omitted from the summary table below, however their concentrations are discussed in Section 7. A full set of laboratory results and the chain of custody are provided as Appendix C.

Determinand	Unit	Land Use Criteria	Sample (depth)														Disposal Guidance Criteria		
			Commercial	TP101 (0.4)	TP101 (1.2)	TP102 (0.4)	TP102 (0.7)	TP102 (1.0)	TP103 (0.3)	TP103 (0.5)	TP104 (0.3)	TP104 (0.7)	TP105 (0.4)	TP105 (0.7)	TP105 (1.1)	TP106 (0.4)	TP106 (0.8)	Recreation SCS	Background Concentrations
				FILL	SILT	FILL	FILL	GRAVEL	FILL	SILT	TOPSOIL	PEAT	FILL	PEAT	PEAT	FILL	SILT		
pH																			
pH	pH	-	6.9	-	5.9	7.3	-	6.9	-	4.7	4.1	7.2	7	-	6.9	-	-	-	
Ammonia																			
Ammonia	mg/kg	-	5.3	-	-	<5	-	<5	-	26.8	12.8	21.7	30.2	-	-	-	-	-	
Heavy Metals																			
Aluminium (Al)	mg/kg	990,000	8460	16600	9800	7590	7390	8250	13400	10800	8310	9110	10700	9910	8110	16400	-	-	
Arsenic (As)	mg/kg	70	4.35	5.8	4.51	6.25	3.12	4.12	3.22	92.2	51.3	25.1	155	500	4.73	8.37	80	12.6	
Boron (B)	mg/kg	>10,000	3.77	5.11	6.87	4.51	6.41	2.4	<u>18.2</u>	<u>49.1</u>	<u>16.6</u>	<u>13</u>	<u>10.6</u>	<u>9.52</u>	2.77	6.97	>10,000	9	
Cadmium (Cd) ^a	mg/kg	1,300	0.04	0.058	0.032	0.052	0.029	0.024	0.1	<u>0.29</u>	0.037	0.13	0.14	0.094	0.03	0.049	400	0.19	
Chromium (Cr) ^b	mg/kg	6,300	13.3	20.2	14.1	12	12.1	12.7	17	17.7	14.2	13	12.7	10.5	11.4	20.5	2,700	22.7	
Cobalt (Co)	mg/kg	500	6.11	13.5	5.62	4.59	4.28	4.95	8.46	7.12	3.44	7.8	6.62	4.06	4.65	13.2	200	-	
Copper (Cu)	mg/kg	>10,000	9.04	14.9	8.54	28.3	5.69	6.51	12	<u>78.7</u>	<u>39.3</u>	<u>46.3</u>	<u>40.3</u>	<u>47.7</u>	6.97	15.6	>10,000	20.3	
Iron (Fe)	mg/kg	720,000	15800	18400	15100	13000	13300	14200	16800	20700	20800	20000	16600	10500	11900	22500	55,000	-	
Lead (Pb)	mg/kg	3,300	15.1	27.3	11.6	41.7	11.3	10.7	21.9	<u>268</u>	<u>121</u>	<u>76.8</u>	<u>77.7</u>	38.9	10.7	25	880	40.9	
Manganese (Mn)	mg/kg	7,500	272	303	269	241	218	249	288	484	179	370	369	244	243	417	3000	-	
Nickel (Ni)	mg/kg	3000 ^c	12.4	18.4	11.9	9.49	9.6	10.6	15.3	14.8	8.61	14.4	11.1	7.97	10.3	18.6	600 ^c	20.7	
Mercury (Hg)	mg/kg	4,200	0.063	0.099	0.076	0.056	0.055	0.051	0.08	<u>0.14</u>	<u>0.13</u>	<u>0.14</u>	<u>0.15</u>	<u>0.18</u>	0.053	0.087	1,800	0.11	
Zinc (Zn)	mg/kg	35000 ^c	47.6	71.6	43.2	51	33.7	37.9	<u>222</u>	<u>206</u>	102	83.4	<u>134</u>	<u>104</u>	38.8	74	14000 ^c	93.9	
Total Petroleum Hydrocarbons (TPH)																			
C7-C9	mg/kg	120	<10	-	-	<10	-	<10	-	<10	-	<10	-	-	<10	-	-	-	
C10-C14	mg/kg	1500	<15	-	-	<15	-	<15	-	<15	-	<15	-	-	<15	-	-	-	
C15-C36	mg/kg	>20,000	<25	-	-	<25	-	<25	-	142	-	413	-	-	<25	-	-	-	
C7-C36 (Total)	mg/kg	N/A	<50	-	-	<50	-	<50	-	142	-	413	-	-	<50	-	-	-	

Table 7: Soil contaminant concentrations against Land Use Criteria

NOTES

^a Assumes a soil pH of 5

^b Criteria for Chromium V

^c NEPC Guideline on the Investigation Levels for Soil and Groundwater

^d Supplemental Guidance for Developing Soil Screening Levels (ES EPA, 20021)

^e Guideline on the Investigation Levels for Soil and Groundwater, NPEC 1999¹³

^f Guidelines for Assessing and Managing Contaminated Gasworks Sites (MfE 1997)

- Denotes analyte not tested or no applicable guidance criteria available

<LoD indicates the concentration is below the laboratory limits of

BOLD indicated concentrations exceed recreational guidance criteria

Shaded indicates concentrations exceed commercial screening criteria

Underlined indicates concentrations exceeds background concentrations

7 ASSESSMENT OF RESULTS

7.1 Analysis of Results

Heavy Metals

Arsenic concentrations between 92.2 mg/kg and 500 mg/kg in topsoil and peat material in TP104 and TP105, respectively, exceeded human health criteria considered protective of a commercial end use / excavation workers.

No other heavy metal concentrations exceeded adopted human health guidelines considered protective of a commercial end use.

Concentrations of arsenic, boron, cadmium, copper, lead, mercury and zinc exceeded published background concentrations in TP104 and TP105.

Heavy metal concentrations in all remaining test pit locations are considered largely representative of naturally occurring background concentrations.

Total Petroleum Hydrocarbons (TPH)

Minor concentrations of TPH in the C₁₅ – C₃₆ carbon banding of 142 mg/kg and 413 mg/kg were encountered in topsoil and fill material in TP104 and TP105, respectively. These concentrations, however, do not exceed human health guidelines considered protective of a commercial end use / excavation workers.

TPH concentrations in remaining test pit locations were less than the laboratory limits of detection.

Organochlorine Pesticides (OCPs)

With the exception of trace concentrations of DDT in TP104 and TP105, all concentrations of OCPs were less than the laboratory limits of detection.

The concentrations of DDT identified in TP104 and TP105 do not exceed applicable human health guidelines.

Ammonia

Concentrations of ammonia between 12.8 mg/kg and 30.2 mg/kg were identified in TP104 and TP105.

Concentrations of ammonia in remaining test locations were either less than the laboratory limit of detection, or considered trace concentrations (5.3 mg/kg)

Cyanide

All concentrations of total cyanide were less than the laboratory limits of detection.

pH

Acidic soils (pH 4.1 – 4.7) were identified in topsoil and peat material from TP104.

All analysed soils in remaining test pit locations identified relatively neutral pH conditions.

8 DISCUSSION

TP104 & TP105

Concentrations of arsenic between 90 – 500 mg/kg have been identified in excess of relevant human health guidelines considered protective of excavation and ground workers (80 mg/kg). Elevated concentrations of ammonia and minor concentrations of petroleum hydrocarbons have also been identified in both test locations, with acidic soil conditions additionally encountered in TP104.

Elevated concentrations of contaminants in TP104 were encountered in topsoil material at approximately 0.3 m bgl, with the underlying organic silt and peat material free of contamination in the context of a commercial end use.

Elevated concentrations of contaminants in TP105, however, were identified in peat material, with arsenic concentrations of 155 mg/kg at 0.7 m bgl and 500 mg/kg at 1.1 m bgl.

Accordingly, in the context of the proposed development works, a risk to human health, principally excavation and earthworkers, has been identified in topsoil and underlying peat material in the eastern region of the site. The risk associated with the identified contamination is discussed further in the Conceptual Site Model below.

TP101, 102, 103 & 106

Potential contaminants identified in the desktop investigation have not been encountered in excess of relevant human health guidelines in test pits TP101, 102, 103 and 106. Concentrations of heavy metals complied with relevant human health guidelines, and are further considered largely representative of naturally occurring background concentrations. No concentrations above limits of reporting for petroleum hydrocarbons were encountered, and pH was relatively neutral (pH 7).

On this basis, contamination has not been identified in these test locations.

9 CONCEPTUAL SITE MODEL

9.1 Introduction

A conceptual site model (CSM) identifies and assesses possible pollutant linkages (PPL) by representing the relationships between potential contamination sources, pathways and receptors. Where PPL's are identified, a risk assessment is undertaken to determine whether each possible linkage exists and to assess whether it poses a potentially unacceptable risk to identified receptors.

The CSM also provides potential mitigation measures where any potentially unacceptable risks to receptors are identified.

9.2 Conceptual Model

Based on the information obtained from this assessment, the risk assessment presented in Table 10 below has been formulated, which identifies all possible pollutants and pollutant linkages at the site in the context of the proposed development.

Source	Pathway	Receptor	Risk	Assessment of Linkage Significance/Potential Mitigation Measures
Arsenic contamination in TP104 and TP105	Direct ingestion of soil or dust, consumption, dermal exposure	Current Site Users	Low to Moderate	Elevated concentrations of contaminants in excess of human health guidelines considered protective of a commercial land use have been identified in surficial soils in the easternmost region of the site within the vicinity of TP104 and TP105. On this basis a risk to current site users exists. The area of contamination relates to a small area of unsealed land in the eastern most region of the site, currently used as an outdoor storage area for a range of miscellaneous materials, predominantly comprising metal and scaffold poles at the time of the investigation. Given the location of this area on the perimeter of the site, it is considered the risk of the identified contaminants to site users is low to moderate.
		Neighbouring Site Users	Very Low	As the contaminants identified are not considered mobile, a very low risk to surrounding human health has been identified.
		Future Site Users	Very Low	It is understood that following the proposed installation of new underground services, all excavations across the site will be backfilled and sealed with either asphalt or concrete hardstand. On this basis, there will be no complete exposure pathway between contaminated soils and future site users for the identified non-volatile contaminants. As such, the risk to future site users is considered very low.
		Construction Workers	Moderate	<p>Arsenic concentrations in TP104 at 0.3 m bgl of 92 mg/kg and in TP105 at 0.7 and 1.1 m bgl of 155 mg/kg and 500 mg/kg, respectively, exceeded relevant human health guidelines considered protective of construction workers. As such, a risk to groundworkers is considered to exist in the context of the proposed earthworks. Due to the relatively short exposure times (i.e. it is understood excavations works will be undertaken with an excavator), the risk to earthworkers is considered moderate.</p> <p>On the basis of the identified contamination, a Site Management Plan (SMP) should be prepared to mitigate risks posed to human health and the surrounding environment by providing appropriate management and control measures for the contaminated soils. Additionally, given some areas of the site proposed to be excavated have not directly been investigated as part of this assessment (i.e. soils underlying the existing buildings), the SMP will provide details and controls for managing potentially contaminated soils not already identified as part of this assessment.</p>

Table 10: Risk Assessment

10 OFF-SITE DISPOSAL GUIDANCE AND FURTHER MONITORING

10.1 Disposal Guidance

It is understood that the client intends to use the majority of excavated soil as backfill following the installation of new services. However, it is anticipated that surplus soils will be encountered during the earthworks and will require off-site disposal. Additionally, soils may not be suitable for backfill from an environmental hazard and/or a geotechnical perspective, and therefore also require removal. On this basis, final volumes of soil removal are not known. As such, this section is intended only as preliminary guidance regarding off-site disposal options based on the limited soil sampling undertaken as part of this investigation. Further assessment, comprising sampling and laboratory analysis, is therefore required once final disposal volumes are known to confirm soils are disposed of at appropriate waste disposal facilities.

Based on the limited soil sampling undertaken to date, three areas of the proposed earthworks can be generalised for the purpose of providing initial information regarding disposal guidance.

TP104 & TP105

Contaminated soils in the vicinity of TP104 and TP105 are considered unsuitable as backfill not only from an environmental hazard perspective, but also in the context of their potential to degrade underground services over their lifespan. On this basis, it is recommended that soils from these locations and immediate surrounding area are temporarily stockpiled and subject to additional laboratory analysis to confirm an appropriate landfill disposal facility. Management measures and controls for temporarily stockpiling contaminated soils will be detailed in a Site Management Plan.

It is anticipated soils in these locations will require disposal at a landfill facility consented to receive contaminated soils, however further assessment is recommended to confirm the appropriate facility.

TP101, 102, 103 and 106

Contamination was not identified in these test locations, with heavy metal concentrations considered largely representative of naturally occurring background concentrations.

On this basis it is anticipated any soils requiring disposal from these locations may be suitable for disposal as cleanfill, or appropriate for disposal at the Christchurch City Council operated Burwood Landfill Disposal Facility. However, further assessment is required before disposal to confirm the appropriate facility.

Un-tested Soils

Soils underlying the existing building have not currently been tested and so the contamination status of soils in these regions of the site are not known. The client has advised that approximately 150 m³ of soil will be disturbed as part of the installation of a new drainage network, with the majority of this work being undertaken within the existing warehousing.

Additionally, an approximately 50 m long trench line is proposed in the eastern outdoor storage yard area in relation to the installation of new power cables. Soils along this proposed trenchline have also not been investigated as part of this DSI, and so the contamination status of underlying soils in this location is also not known.

On the basis of the long development history and the risk of soil contamination as identified in the desk study assessment, soils in these un-tested regions should be deemed and treated as potentially contaminated during soil disturbance activities. As per Section 10.2 below, earthwork monitoring by a suitably qualified environmental practitioner should be undertaken during the works to identify any contaminated, or potentially contaminated soils unsuitable for use as backfill.

Any contaminated or potentially contaminated soils unsuitable as backfill in these locations should be temporarily stockpiled, as per management controls detailed in the SMP, and subject to laboratory analysis to confirm an appropriate landfill disposal facility.

10.2 Earthworks Monitoring

On the basis that large areas of the site have not been subject to laboratory analysis as part of this investigation, principally within the existing warehouses, it is recommended that environmental monitoring is undertaken during the soil disturbance activities by a suitably qualified environmental practitioner. The purpose of undertaking monitoring during the earthworks is to enable the identification of contaminated, or potentially contaminated soils unsuitable for backfilling.

Soils in these locations should be treated as potentially contaminated during the earthworks, with controls detailed in the Site Management Plan implemented during the excavation works.

11 CONCLUSION AND RECOMMENDATIONS

11.1 Conclusions

20 Station Road, in Belfast, Christchurch, previously functioning as the Kaputone Wool Scour facility, is proposed for redevelopment into a water bottling plant. It is understood that as part of these works the client is upgrading the underground power and drainage network within both the existing warehouses and across the outdoor storage yard areas. Soil disturbance activities are therefore proposed across the site during the redevelopment works.

The site is registered on Environment Canterbury's (ECan) Listed Land Use Register (LLUR) in connection with potentially contaminating land use activities, specifically relating to skin or wool processing (HAIL A16) and storage tanks for fuel (HAIL A17). Accordingly, the proposed soil disturbance activities are required to comply with the Ministry for the Environment (MfE) National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (the NES).

Based on information provided by the client, it is understood that a total of approximately 270 m³ of soil disturbance is proposed at the site as part of the upgrade to the underground service and drainage network. On the basis that volumes of soil disturbance exceeded permitted volumes specified in Regulation 8(3) of the NES, a resource consent is required for the proposed earthworks.

Following a review of available information, including historical aerial photographs and information held by the Christchurch City Council (CCC), the site has had a long development history, with the earliest available photography in 1940 identifying the southern half of the site as developed with warehouses. Since circa. 1940 to at least 1970, the majority of the site surface appeared unsealed, with evidence of outdoor storage and possible earthwork / landfilling activities having occurred in the easternmost region of the site. Any potentially contaminative activities undertaken during this period are considered to have been at a high risk of contaminating underlying soils due to the absence of an impervious protective hardstand seal.

On this basis, and in the context of more recent potentially contaminating land use activities associated with the Kaputone Wool Scour facility, site soils were considered potentially contaminated, with a potential risk to human health identified in the context of the proposed earthworks. As such, and in accordance with NES regulations, a Detailed Site Investigation (DSI) was undertaken to assess potential on-site contamination, assess potential risks to human health, and to determine the compliance of the development activity with NESCS regulations.

Kirk Roberts's site investigation, undertaken on the 26th September 2017, comprised the advancement of machine excavated test pits to up to 1.5 m below ground level (bgl) at six locations determined by the client in areas of proposed earthworks. Soil samples were collected from shallow fill and underlying soils, and analysed for potential contaminants based on the findings of the desktop study.

Following laboratory analysis, two test locations (TP104 and TP105) in the eastern region of the site encountered soil contamination, with concentrations of arsenic between 90 – 500 mg/kg identified in excess of human health guidelines considered protective of excavation and ground workers. Detectable concentrations of petroleum hydrocarbons and acidic soil conditions were also encountered in these locations. Soils in these locations are therefore considered contaminated, and additionally unsuitable for backfilling. All remaining test locations complied with relevant human health guidance criteria, with no contamination identified.

A conceptual site model has identified that a risk to human health is present in the eastern region of the site, principally associated with maintenance / earthworkers during the proposed soil disturbance activities. Future site users are not considered to be at risk on the basis that excavations are understood to be reinstated and sealed

following the installation works, thereby removing any exposure pathway between remaining contaminated soils and site users.

Large areas of the site also proposed for soil disturbance activities have not been assessed as part of this investigation, principally within the existing warehouses. It is recommended that environmental monitoring is undertaken during the soil disturbance activities by a suitably qualified environmental practitioner. The purpose of undertaking monitoring during the earthworks is to enable the identification of contaminated, or potentially contaminated soils unsuitable for backfilling.

11.2 Recommendations

Kirk Roberts Consulting Engineers recommend the following:

- **Apply for resource consent for soil disturbance activities and seek CCC approval for soil disturbance works:**

Based on discussions with CCC, the volumes of soil disturbance exceed the permitted volumes specified in Regulation 8(3) and a resource consent for soil disturbance activities under the NESCS is required. On the basis of the identification of elevated arsenic concentrations in exceedance of applicable human health standards, a resource consent for soil disturbance activities is required as a Restricted Discretionary Activity under the NESCS (Regulation 10).

- **Implement a Site Management Plan (SMP) during the proposed soil disturbance activities:**

In order to satisfy Christchurch City Council (CCC) consent application requirements, and to mitigate the identified risks posed to earthworkers during the proposed soil disturbance activities, a Site Management Plan (SMP) detailing appropriate management and control measures for the earthworks shall be prepared and implemented. Given large areas of the site have not been assessed during this investigation, there remains a risk of encountering further unidentified contamination during the earthworks. The SMP shall therefore also provide appropriate control and management measures for undertaking soil disturbance works in potentially contaminated areas.

- **Seek approval of appropriately licensed disposal facilities to receive the excavated soils:**

It is understood that surplus soils during the earthwork activities will require off-site disposal. The client intends to re-use as much excavated soil as backfill, and so final disposal volumes are currently not known. On this basis, any soil requiring removal requires to be temporarily stockpiled, as per controls detailed in the SMP, and subject to additional laboratory analysis to confirm appropriate landfill disposal facilities. Any contaminated, or potentially contaminated soils should be stockpiled separately with appropriate management measures in place to avoid cross contamination. All disposed soil is required to be documented by way of soil waste transfer manifest, detailing the originating area of the site, disposal facility and volume of material.

12 REFERENCES


- 1 <http://www.mfe.govt.nz/sites/default/files/hazards/contaminated-land/is-land-contaminated/hazardous-activities-industries-list.pdf>
- 2 Ministry for the Environment 2012: *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*.
- 3 Geological Nuclear Sciences New Zealand Geology Web Map viewed at: <http://data.gns.cri.nz/geology/>
- 4 Canterbury Regional Council 2014: *Environment Canterbury Online GIS Database* viewed at: <http://canterburymaps.govt.nz/AdvancedViewer/>
- 5 Canterbury Regional Council 2014: *Environment Canterbury Online GIS Database* viewed at: <http://canterburymaps.govt.nz/Viewer/#webmap=0c3ca2ccfe1145c5849dc39864590d0b>
- 6 Google Earth 2016. Viewed at: <https://www.google.com/earth/>
- 7 Ministry for the Environment 2011 (Revised): *Contaminated Land Management Guidelines No. 5-Site Investigation and Analysis of Soils*
- 8 Canterbury Regional Council 2014: *Environment Canterbury Online GIS Database* viewed at: <https://mapviewer.canterburymaps.govt.nz/?webmap=a0012c7783074532a53f9847331ef8eb&extent=1348406.0237437834,5110574.8720371965,1709827.5799202293,5279379.376312872,2193>
- 9 Environment Canterbury, 2007, Background concentrations of selected trace elements in Canterbury,.

APPENDIX A

- Historical Aerial Photography


ORIGINAL SIZE A4
DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS	20 Station Road Christchurch	1940 - 1944 AERIAL PHOTOGRAPH	
SOURCE: ENVIRONMENT CANTERBURY GIS MAPPING			

ORIGINAL SIZE A4
DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS	20 Station Road Christchurch	1955 - 1959 AERIAL PHOTOGRAPH	
SOURCE: ENVIRONMENT CANTERBURY GIS MAPPING			

ORIGINAL SIZE A4 DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS
SOURCE: ENVIRONMENT
CANTERBURY GIS MAPPING

20 Station Road
Christchurch

1960 - 1964 AERIAL PHOTOGRAPH



ORIGINAL SIZE A4 DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS
SOURCE: GOOGLE EARTH

20 Station Road
Christchurch

1970 - 1974 AERIAL PHOTOGRAPH



ORIGINAL SIZE A4
DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS	20 Station Road Christchurch	1975 - 1979 AERIAL PHOTOGRAPH	
SOURCE: GOOGLE EARTH			

ORIGINAL SIZE A4
DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS
SOURCE: GOOGLE EARTH


20 Station Road
Christchurch

1980 - 1984 AERIAL PHOTOGRAPH



ORIGINAL SIZE A4
DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS SOURCE: GOOGLE EARTH	20 Station Road Christchurch	1990 - 1994 AERIAL PHOTOGRAPH	 KIRK ROBERTS CONSULTING ENGINEERS
------------------------------------	---------------------------------	-------------------------------	---

ORIGINAL SIZE A4 DO NOT SCALE - IF IN DOUBT, ASK



SCALE: NTS
SOURCE: ENVIRONMENT
CANTERBURY GIS MAPPING

20 Station Road
Christchurch

LATEST PHOTOGRAPH



APPENDIX B

- Site Test Location Plan
- Test Pit Logs



No.	Date	Revision	By

Project	20 Station Road Belfast
---------	----------------------------

Client	Cloud Ocean Water Limited
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Title	SITE PLAN
-------	-----------

Designed by	JJ
Drawn by	JJ
Checked by	AW
Date	03/10/17

Scale	Not to Scale
Job No.	1710455
Drawing No.	SK - 1
Rev.	A

HAND AUGER RESULTS



Scala Penetrometer:

Hand Auger: HA-TP101

Job No.: 1710455

Date: 26/09/17

Weather: Fine

Operator: JJ

Client: Cloud Ocean Water Limited

Site Address: 20 Station Road

Town/City: Christchurch

Geological Formation	Depth (m)	Sample Description	Graphic	USCS	D _r	Water Table	Undrained Shear Strength S _u (kPa)	Blows per 100 mm of Penetration																		
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		FILL Surface gravel fill material:		FILL		Groundwater Not Encountered																				
	0.5	Sandy GRAVEL Brown, sandy gravel, dry; (Probable Natural). 0.4m: Enviro sample @ 0.4		GS																						
	1.0	SILT Grey silt, firm, non-plastic, moist. 1.2m: Enviro sample @ 1.2 EOH: 1.40m		M																						
	1.5																									

<p>Remarks: Scala Penetrometer and Test Bore log tests give an indication of the ground condition at the location of the tests only. While they are representative of typical conditions across the site, they do not identify variations in the ground away from the test locations.</p>	<p>Symbols: Standing Water Level Out flow In flow</p>
	<p>337 Saint Asaph Street, Christchurch 8011</p>

HAND AUGER RESULTS



Scala Penetrometer:

Hand Auger: HA-TP102

Job No.: 1710455

Date: 26/09/17

Weather: Fine

Operator: JJ

Client: Cloud Ocean Water Limited

Site Address: 20 Station Road

Town/City: Christchurch

Geological Formation	Depth (m)	Sample Description	Graphic	USCS	D _r	Water Table	Undrained Shear Strength S _u (kPa)	Blows per 100 mm of Penetration																		
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
FILL		Surface gravel and broken asphalt fill material:.		FILL		Groundwater Not Encountered																				
		Greyish brown, sandy fill material: & gravel.																								
	0.5	Asphalt. 0.4m: Enviro sample @ 0.4																								
		Greyish brown sandy gravel fill material:.																								
Sandy GRAVEL	1.0	Grey, sandy gravel. 0.7m: Enviro sample @ 0.7		GS																						
		1.0m: Enviro sample @ 1.0																								
	1.5	EOH: 1.50m																								

Remarks: Scala Penetrometer and Test Bore log tests give an indication of the ground condition at the location of the tests only. While they are representative of typical conditions across the site, they do not identify variations in the ground away from the test locations.

Symbols:
 Standing Water Level
 Out flow
 In flow

HAND AUGER RESULTS



Scala Penetrometer:

Hand Auger: HA-TP104

Job No.: 1710455

Date: 26/09/17

Weather: Fine

Operator: JJ

Client: Cloud Ocean Water Limited

Site Address: 20 Station Road

Town/City: Christchurch

Geological Formation	Depth (m)	Sample Description	Graphic	USCS	D _r	Water Table	Undrained Shear Strength S _u (kPa)	Blows per 100 mm of Penetration																		
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	0.5	TOPSOIL Dark brown, organic silt; With brick and concrete. 0.3m: Enviro sample @ 0.3		OL		Groundwater Not Encountered																				
		FILL Laid brick.		FILL																						
		PEAT Dark brown peaty silt material, soft, saturated. 0.6m: Perched water 0.7m: Enviro sample @ 0.7		PT																						
		SILT Brownish grey silt. EOH: 1.40m		M																						
	1.0																									
	1.5																									

Remarks: Scala Penetrometer and Test Bore log tests give an indication of the ground condition at the location of the tests only. While they are representative of typical conditions across the site, they do not identify variations in the ground away from the test locations.

Symbols:
 Standing Water Level
 Out flow
 In flow

HAND AUGER RESULTS



Scala Penetrometer:

Hand Auger: HA-TP106

Job No.: 1710455

Date: 26/09/17

Weather: Fine

Operator: JJ

Client: Cloud Ocean Water Limited

Site Address: 20 Station Road

Town/City: Christchurch

Geological Formation	Depth (m)	Sample Description	Graphic	USCS	D _r	Water Table	Undrained Shear Strength S _u (kPa)	Blows per 100 mm of Penetration																						
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
		FILL Asphalt.		FILL		Groundwater Not Encountered																								
		FILL Gravel fill material: 0.3m: Enviro sample @ 0.3																												
		SILT Bluish grey silt. 0.7m: Enviro sample @ 0.7							M																					
	1.0	EOH: 1.00m																												
	1.5																													

Remarks: Scala Penetrometer and Test Bore log tests give an indication of the ground condition at the location of the tests only. While they are representative of typical conditions across the site, they do not identify variations in the ground away from the test locations.	Symbols: ▽ Standing Water Level ⊠ Out flow ▷ In flow
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APPENDIX C

- Laboratory Test Results
- Chain of Custody



CLIENT INFORMATION				Page #	1	of	1
Client	Kirk Roberts Ltd.			Customer Comments / Instructions James Rang ↑ Confirmed TCN = Total cyanide I.O (Sample 20SR TP102.0 Arrived damaged Transferred and Sample ID into new Jar)			
Address	337 St Asaph Street, Christchurch						
Project Leader	James Jackson						
Project ID	1710455	PO #	1710455				
Site	20 Station Road. ("20SR")						
Sampler	James Jackson						
Phone	021 264 7343						
Email	jamesj@kirkroberts.co.nz						
Invoice Email							

LABORATORY USE ONLY							
Laboratory Job #	17-23332		Seal Status	/		Priority (mark with X)	
Date Received	28/9/17	Received By	Ike	Sample Temp Status		Routine	Urgent

TESTS REQUESTED												
Lab ID	Sample ID	Depth	Date	Time	Matrix	# Cont.	Analysis Requests/Suites					Sample Comments
							WLS_TR	OCP	TPH	NH4	PH	
1	20SR TP101	0.4	26/9/17		S or W		✓	✓	✓	✓	✓	
2	TP101	1.2			S or W		✓					
3	TP102	0.4			S or W		✓			✓		
4	TP102	0.7			S or W		✓		✓	✓	✓	
5	TP102	1.0			S or W		✓					
6	TP103	0.3			S or W		✓	✓	✓	✓	✓	
7	TP103	0.5			S or W		✓					
8	TP104	0.3			S or W		✓	✓	✓	✓		
9	TP104	0.7			S or W		✓			✓	✓	
10	TP105	0.4			S or W		✓		✓	✓	✓	
11	TP105	0.7			S or W		✓	✓		✓	✓	
12	TP105	1.1			S or W		✓					
13	TP106	0.4			S or W		✓		✓	✓		
14	TP106	0.8			S or W		✓					
					S or W							
					S or W							
					S or W							
					S or W							

Relinquished by		Received by	Received: Matt B		Courier	NZ Couriers JDQ 0000 2654
Date	17	Date	D/T: 28/9/17 0625		Courier #	

CHAIN OF CUSTODY



CLIENT INFORMATION				Page #	of
Client	Kirk Roberts Consulting Engineers			Customer Comments / Instructions	
Address	337 St Asaphy Christchurch				
Project Leader	James Creek				
Project ID	1710331	PO #			
Site	14 Basil Place				
Sampler	James Creek				
Phone	022 678 2993				
Email	James C @ kirk.roberts.co.nz				
Invoice Email					

LABORATORY USE ONLY					
Laboratory Job #		Seal Status		Priority (mark with X)	
Date Received	2/2	Received By		Sample Temp Status	
				Routine	Urgent

TESTS REQUESTED							Analysis Requests/Suites				Sample Comments
Lab ID	Sample ID	Depth	Date	Time	Matrix	# Cont.					
15	14 Basil HA1	0.1m	26/9/17	3:00	0 or W		✓	✓			
16	14 Basil HA2	0.1m	26/9/17	3:00	0 or W		✓	✓			
					S or W						
					S or W						
					S or W						
					S or W						
					S or W						
					S or W						
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					S or W						
					S or W						
					S or W						

Relinquished by		Received by		Courier	
Date	2/2	Date	2/2	Courier #	



Certificate of Analysis

Kirk Roberts
 Level 1, 337 St Asaph Street
 CHRISTCHURCH 8640
 Attention: James Jackson
 Phone: 021 264 7343
 Email: jamesj@kirkroberts.co.nz

Lab Reference: 17-23332
 Submitted by: James Jackson
 Date Received: 28/09/2017
 Date Completed: 5/10/2017
 Order Number: 1710455
 Reference: 1710455

Sampling Site: 20 Station Road ("20SR")

Soil Aggregate Properties and Nutrients

Client Sample ID			20SR TP101 Depth 0.4	20SR TP102 Depth 0.4	20SR TP102 Depth 0.7	20SR TP103 Depth 0.3	20SR TP104 Depth 0.3
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-1	17-23332-3	17-23332-4	17-23332-6	17-23332-8
Ammonia-N*	mg/kg dry wt	5	5.30		<5	<5	26.8
pH*	pH	1	6.9	5.9	7.3	6.9	4.7
Total Cyanide*	mg/kg	0.2	<0.2		<0.2	<0.2	

Soil Aggregate Properties and Nutrients

Client Sample ID			20SR TP104 Depth 0.7	20SR TP105 Depth 0.4	20SR TP105 Depth 0.7	20SR TP106 Depth 0.4
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-9	17-23332-10	17-23332-11	17-23332-13
Ammonia-N*	mg/kg dry wt	5	12.8	21.7	30.2	
pH*	pH	1	4.1	7.2	7.0	6.9
Total Cyanide*	mg/kg	0.2		<0.2		

Elements in Soil

Client Sample ID			20SR TP101 Depth 0.4	20SR TP101 Depth 1.2	20SR TP102 Depth 0.4	20SR TP102 Depth 0.7	20SR TP102 Depth 1.0
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-1	17-23332-2	17-23332-3	17-23332-4	17-23332-5
Aluminium*	mg/kg dry wt	2.5	8,460	16,600	9,800	7,590	7,390
Arsenic	mg/kg dry wt	0.125	4.35	5.80	4.51	6.25	3.12
Boron	mg/kg dry wt	1.25	3.77	5.11	6.87	4.51	6.41
Cadmium	mg/kg dry wt	0.005	0.040	0.058	0.032	0.052	0.029
Chromium	mg/kg dry wt	0.125	13.3	20.2	14.1	12.0	12.1
Cobalt	mg/kg dry wt	0.025	6.11	13.5	5.62	4.59	4.28
Copper	mg/kg dry wt	0.075	9.04	14.9	8.54	28.3	5.69



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation, with the exception of tests marked *, which are not accredited.

Elements in Soil

Client Sample ID			20SR TP101 Depth 0.4	20SR TP101 Depth 1.2	20SR TP102 Depth 0.4	20SR TP102 Depth 0.7	20SR TP102 Depth 1.0
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Iron*	mg/kg dry wt	12.5	15,800	18,400	15,100	13,000	13,300
Lead	mg/kg dry wt	0.05	15.1	27.3	11.6	41.7	11.3
Manganese	mg/kg dry wt	0.125	272	303	269	241	218
Nickel	mg/kg dry wt	0.05	12.4	18.4	11.9	9.49	9.60
Mercury	mg/kg dry wt	0.025	0.063	0.099	0.076	0.056	0.055
Zinc	mg/kg dry wt	0.05	47.6	71.6	43.2	51.0	33.7

Elements in Soil

Client Sample ID			20SR TP103 Depth 0.3	20SR TP103 Depth 0.5	20SR TP104 Depth 0.3	20SR TP104 Depth 0.7	20SR TP105 Depth 0.4
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-6	17-23332-7	17-23332-8	17-23332-9	17-23332-10
Aluminium*	mg/kg dry wt	2.5	8,250	13,400	10,800	8,310	9,110
Arsenic	mg/kg dry wt	0.125	4.12	3.22	92.2	51.3	25.1
Boron	mg/kg dry wt	1.25	2.40	18.2	49.1	16.6	13.0
Cadmium	mg/kg dry wt	0.005	0.024	0.10	0.29	0.037	0.13
Chromium	mg/kg dry wt	0.125	12.7	17.0	17.7	14.2	13.0
Cobalt	mg/kg dry wt	0.025	4.95	8.46	7.12	3.44	7.80
Copper	mg/kg dry wt	0.075	6.51	12.0	78.7	39.3	46.3
Iron*	mg/kg dry wt	12.5	14,200	16,800	20,700	20,800	20,000
Lead	mg/kg dry wt	0.05	10.7	21.9	268	121	76.8
Manganese	mg/kg dry wt	0.125	249	288	484	179	370
Nickel	mg/kg dry wt	0.05	10.6	15.3	14.8	8.61	14.4
Mercury	mg/kg dry wt	0.025	0.051	0.080	0.14	0.13	0.14
Zinc	mg/kg dry wt	0.05	37.9	222	206	102	83.4

Elements in Soil

Client Sample ID			20SR TP105 Depth 0.7	20SR TP105 Depth 1.1	20SR TP106 Depth 0.4	20SR TP106 Depth 0.8
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-11	17-23332-12	17-23332-13	17-23332-14
Aluminium*	mg/kg dry wt	2.5	10,700	9,910	8,110	16,400
Arsenic	mg/kg dry wt	0.125	155	500	4.73	8.37
Boron	mg/kg dry wt	1.25	10.6	9.52	2.77	6.97
Cadmium	mg/kg dry wt	0.005	0.14	0.094	0.030	0.049
Chromium	mg/kg dry wt	0.125	12.7	10.5	11.4	20.5
Cobalt	mg/kg dry wt	0.025	6.62	4.06	4.65	13.2
Copper	mg/kg dry wt	0.075	40.3	47.7	6.97	15.6
Iron*	mg/kg dry wt	12.5	16,600	10,500	11,900	22,500
Lead	mg/kg dry wt	0.05	77.7	38.9	10.7	25.0
Manganese	mg/kg dry wt	0.125	369	244	243	417
Nickel	mg/kg dry wt	0.05	11.1	7.97	10.3	18.6
Mercury	mg/kg dry wt	0.025	0.15	0.18	0.053	0.087
Zinc	mg/kg dry wt	0.05	134	104	38.8	74.0

Total Petroleum Hydrocarbons - Soil

Client Sample ID			20SR TP101 Depth 0.4	20SR TP102 Depth 0.7	20SR TP103 Depth 0.3	20SR TP104 Depth 0.3	20SR TP105 Depth 0.4
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-1	17-23332-4	17-23332-6	17-23332-8	17-23332-10
C7-C9	mg/kg dry wt	10	<10	<10	<10	<10	<10
C10-C14	mg/kg dry wt	15	<15	<15	<15	<15	<15
C15-C36	mg/kg dry wt	25	<25	<25	<25	142	413
C7-C36 (Total)	mg/kg dry wt	50	<50	<50	<50	142	413

Total Petroleum Hydrocarbons - Soil

Client Sample ID			20SR TP106 Depth 0.4
Date Sampled			26/09/2017
Analyte	Unit	Reporting Limit	17-23332-13
C7-C9	mg/kg dry wt	10	<10
C10-C14	mg/kg dry wt	15	<15
C15-C36	mg/kg dry wt	25	<25
C7-C36 (Total)	mg/kg dry wt	50	<50

Organochlorine Pesticides - Soil

Client Sample ID			20SR TP101 Depth 0.4	20SR TP103 Depth 0.3	20SR TP104 Depth 0.3	20SR TP105 Depth 0.7
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-1	17-23332-6	17-23332-8	17-23332-11
2,4'-DDD	mg/kg dry wt	0.005	<0.005	<0.005	0.012	0.008
2,4'-DDE	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
2,4'-DDT	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
4,4'-DDD	mg/kg dry wt	0.003	<0.005	<0.005	0.014	0.027
4,4'-DDE	mg/kg dry wt	0.005	<0.005	<0.005	0.026	0.009
4,4'-DDT	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Total DDT	mg/kg dry wt	0.02	<0.02	<0.02	0.05	0.04
alpha-BHC	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
beta-BHC	mg/kg dry wt	0.005	<0.005	<0.005	0.007	<0.005
cis-Chlordane	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
cis-Nonachlor	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
delta-BHC	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Dieldrin	mg/kg dry wt	0.05	<0.05	<0.05	0.18	0.18
Endosulfan I	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan sulphate	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Endrin	mg/kg dry wt	0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
Endrin ketone	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
gamma-BHC	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor epoxide	mg/kg dry wt	0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	mg/kg dry wt	0.005	<0.005	<0.005	0.011	<0.005
Methoxychlor	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
trans-nonachlor	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
trans-Chlordane	mg/kg dry wt	0.01	<0.01	<0.01	<0.01	<0.01
Chlordane (sum)	mg/kg dry wt	0.02	<0.02	<0.02	<0.02	<0.02
TCMX (Surrogate)	%	1	98.2	103.3	97.3	79.8

Moisture Content

Client Sample ID			20SR TP101 Depth 0.4	20SR TP102 Depth 0.7	20SR TP103 Depth 0.3	20SR TP104 Depth 0.3	20SR TP105 Depth 0.4
Date Sampled			26/09/2017	26/09/2017	26/09/2017	26/09/2017	26/09/2017
Analyte	Unit	Reporting Limit	17-23332-1	17-23332-4	17-23332-6	17-23332-8	17-23332-10
Moisture Content	%	1	4	5	7	24	13

Moisture Content

Client Sample ID			20SR TP106 Depth 0.4
Date Sampled			26/09/2017
Analyte	Unit	Reporting Limit	17-23332-13
Moisture Content	%	1	6

Method Summary

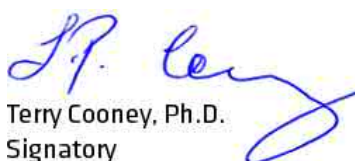
- Ammonia-N in Soil** 1:5 water extraction followed by colour-metric analysis. NEPM, Schedule B3, Laboratory Analysis of Potentially Contaminated Soil, 2011.
- pH in Soil** 1:2.5 extraction with 0.1M calcium chloride followed by pH probe determination. Department of Sustainable Natural Resources.
- Cyanide** Water extraction followed by acid distillation, distillate measured by colourmetric analysis. APHA Method 4500-CN C and E.
- Elements in Soil** Acid digestion followed by ICP-MS analysis. US EPA method 200.8.
- TPH in Soil** Solvent extraction, silica cleanup, followed by GC-FID analysis. (C7-C36)
- OCP in Soil** Samples are extracted with hexane, pre-concentrated then analysed by GC-MSMS. In house method.
(Chlordane (sum) is calculated from the main actives in technical Chlordane: Chlordane, Nonachlor and Heptachlor)
- Total DDT** Sum of DDT, DDD and DDE (4,4' and 2,4 isomers)
- Moisture** Moisture content is determined gravimetrically by drying at 103 °C.

Report Comments

Samples were received by Analytica Laboratories in acceptable condition unless otherwise noted on this report.



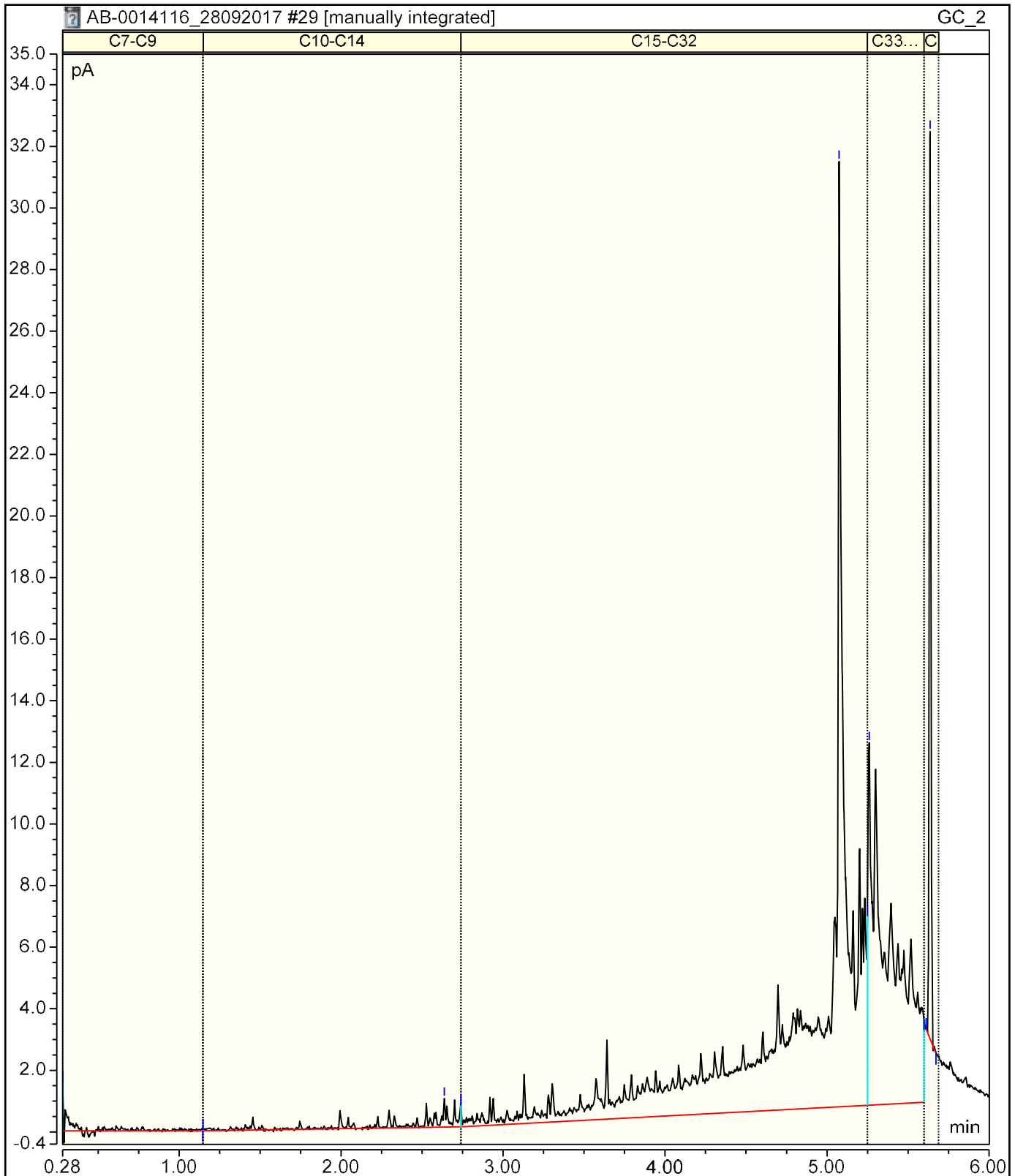
Sharelle Frank, B.Sc. (Tech)
Technologist



Terry Cooney, Ph.D.
Signatory

Chromatogram

17-23332-10



Kelly Andrew

From: Mthamo, Victor <Victor.Mthamo@ccc.govt.nz> on behalf of StormwaterApprovals <Stormwater.Approvals@ccc.govt.nz>
Sent: Wednesday, 24 January 2018 10:30 PM
To: 'Russell Brents'
Cc: 'James Jackson'; 'Jordan Walker'; 'Lewis Webster'
Subject: Stormwater Comments - 20 Station Road - SW Discharge Consent

Hi Russell,

As discussed over the phone the critical duration is 48 hours. Treatment (e.g. via a wetland) and retention required.

In the Styx SMP, we accept "partial detention" rather than full extra-over for a 50-year 48-hour storm, as long as the retention provided is set up to mitigate effects on the local network. By partial detention, we mean the volume of stormwater equal to the First Flush Volume, plus the volume of stormwater that would be stored over an appropriately sized "virtual" wetland.

FF volume is calculated according to Wetlands Guide Eqn. 6-2, then size an imaginary wetland in accordance with Eqn 6-24. Take that surface area (As) and multiply by 0.5 (to arrive at the volume of storage captured by flooding the wetland 500mm). $V_{\text{partialdetention}} = V_{\text{ff}} + (A_{\text{s}} * 0.5)$. Then, figure out the best way to release that volume to best mitigate the effects.

But ECan will be able to advise on these requirements in detail as you apply for a consent as they will ensure that the Styx SMP will be complied with.

Kind Regards,
Victor

From: Russell Brents [mailto:russellb@kirkroberts.co.nz]
Sent: Tuesday, 23 January 2018 3:32 p.m.
To: Mthamo, Victor <Victor.Mthamo@ccc.govt.nz>
Cc: James Jackson <jamesj@kirkroberts.co.nz>; Jordan Walker <jordanw@kirkroberts.co.nz>; Lewis Webster <lewisw@kirkroberts.co.nz>
Subject: 20 Station Road - SW Discharge Consent

Hi Victor,

Thanks for taking my call this afternoon. As discussed, CCC has determined the property at 20 Station Road Belfast is a high risk and cannot meet the conditions of the ECAN Global Consent CCC holds for stormwater discharges. We understand this will require our client to obtain their own discharge consent from ECAN to drain into the Kaputone Stream, which will require them to meet the pre-developed conditions from 2010. Can you confirm the stormwater events we should consider in our design for attenuation and any specific treatment requirements that may be required?

Regards
Russell Brents
Senior Civil Engineer



Level 1, 337 St Asaph Street, Christchurch
PO Box 35320, Christchurch 8640
P: 03 379 8600
F: 03 379 8605
E: russellb@kirkroberts.co.nz
W: www.kirkroberts.co.nz

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Kelly Andrew

From: McDonald, Yvonne <Yvonne.McDonald@ccc.govt.nz>
Sent: Friday, 23 March 2018 4:59 PM
To: Kelly Andrew
Subject: RMA/2017/3173 ENGINEERING - EARTHWORKS - 20 Station Road suggested conditions

Kelly,

20 Station Rd is zoned Industrial Heavy and is in a Liquefaction Management Area. It currently contains the Kaputone Wool Scour buildings. It fronts the railway on the west, Kaputone Creek and accesses Station Rd to the south. A building consent for drainage to Cloud Ocean Water was refused. An abatement notice has been issued for earthworks carried out without consent. RMA/2018/337 is being processed for these works and the applicant has confirmed that information presented under RMA/2018/337 consent may be used to support RMA/2017/3173.

I have looked at the Novo Group land use consent for future earthworks and removal of stockpiled material dated 14 December 2017. Earthworks involving power network excavations are exempt. Stockpiles of 260-290m³ will be removed. 225m³ of excavation for the wastewater drainage network within the site adjacent to the buildings is proposed, to depths of 1.0m. Excavation for two stormwater pipe repair lengths is detailed in additional information received 15 March 2018. This is 75m³ to a maximum depth of 1.0m, with some of this in the waterway setback. **I cannot see any detail of these two lines claimed to be included in the appendices to the original AEE. The effects will be similar so addressed in my suggested conditions regardless.**

The site is contaminated, with diesel tanks etc. Works must therefore comply with the Ministry for the Environment (MfE) National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (the NES). The application includes a Kirk Roberts Consulting Engineers Site Management Plan Issue C setting out standards to be applied during the excavation. These include stormwater and sediment control. NES have accepted this SMP, as do I with the presentation for acceptance of an Erosion and Sediment Control Plan (ESCP). I have amended the following NES conditions and mine to streamline and combine where appropriate. I have confirmed this is acceptable with Hannah.

- 1. All earthworks on site shall be managed in accordance with an Environmental Management Plan (EMP) which shall include an Erosion and Sediment Control Plan (ESCP) and the Site Management Plan by Kirk Roberts, dated December 2017. The accepted EMP shall be implemented on site over the construction phase and no works are to commence until such time as the EMP has been installed. 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 map showing the location of all works;*
 - Detailed plans showing the location of sediment and dust control measures, on-site catchment boundaries and sources of runoff;*
 - Drawings and specifications of designated sediment and dust control measures;*
 - A programme of works, which includes but is not limited to, a proposed timeframe for the works;*
 - Installation of devices until the site is stabilised (i.e. grassed); and*
 - Inspection and maintenance schedules for the sediment and dust control measures.*
 - A site description, i.e. topography, vegetation, soils, etc;*
 - Details of proposed activities;*
 - Drawings showing the protection of natural assets and habitats;*
 - Emergency response and contingency management;*
 - Procedures for compliance with resource consents and permitted activities;*
 - 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.

2. *To minimise the spread of contaminated material, all stockpiles of excavated potentially contaminated material shall be located on an impermeable surface within the catchment of erosion and sediment controls for the site. All stockpiles shall be covered with either polythene or an equivalent impermeable material when the site is not being worked and during periods of heavy rain.*
3. *All excavated areas and any excavated soils that will be reused on site shall be sealed or capped or disposed to an authorised facility. All bared surfaces within the waterway setback shall be adequately topsoiled and vegetated as soon as possible to limit sediment mobilisation.*

I have amended the waterways planner's conditions in conjunction with mine to streamline and combine where appropriate. I have confirmed this is acceptable with Emily.

- *Unless approved as part of a separate ECan resource consent for stormwater discharge or Ecan resource consent for excavation/filling the ESCP will require formal acceptance by Christchurch City Council's Subdivision Engineer (email to rcmon@ccc.govt.nz) prior to any work starting on site. ~~If earthworks are within the waterway setback~~ The ESCP requires formal acceptance ~~should be included with the application for approval~~ by the Councils Waterways Ecologist. The ESCP shall be designed by a suitably qualified person and a design certificate (template available on request) supplied with the ESCP for acceptance at least 5 days prior to the works commencing. The ESCP shall comply with Environment Canterbury's Erosion and Sediment Control Toolbox for the Canterbury Region <http://escscanterbury.co.nz/> and include:

 - ~~A map showing the location of all works;~~
 - ~~Detailed plans showing the location of sediment and dust control measures, on-site catchment boundaries and sources of runoff;~~
 - ~~Drawings and specifications of designated sediment and dust control measures;~~
 - ~~A programme of works, which includes but is not limited to, a proposed timeframe for the works;~~
 - ~~Installation of devices until the site is stabilised (i.e. grassed); and~~
 - ~~Inspection and maintenance schedules for the sediment and dust control measures.~~*
- *The Erosion and Sediment Control Plan shall show the positions of all stockpiles on site. No stockpiling of material shall be within the setback.*

Should consent be granted, I suggest the following conditions related to Chapter 8.2.4 and 8.2.5 of the District Plan be imposed.

1. All earthworks on site shall be managed in accordance with an Environmental Management Plan (EMP) which shall include an Erosion and Sediment Control Plan (ESCP) and the Site Management Plan (SMP) by Kirk Roberts, dated December 2017. The accepted EMP shall be implemented on site over the construction phase and no works are to commence until such time as the EMP has been installed. Unless approved as part of a separate ECan resource consent for stormwater discharge or Ecan resource consent for excavation/filling the ESCP will require formal acceptance by Christchurch City Council's Subdivision Engineer (email to rcmon@ccc.govt.nz) prior to any work starting on site. The ESCP requires formal acceptance by the Councils Waterways Ecologist. The ESCP shall be designed by a suitably qualified person and a design certificate (template available on request) supplied with the ESCP for acceptance at least 5 days prior to the works commencing. The ESCP shall comply with Environment Canterbury's Erosion and Sediment Control Toolbox for the Canterbury Region <http://escscanterbury.co.nz/>. 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 map showing the location of all works;
 - Detailed plans showing the location of sediment and dust control measures, on-site catchment boundaries and sources of runoff;
 - Drawings and specifications of designated sediment and dust control measures;
 - A programme of works, which includes but is not limited to, a proposed timeframe for the works;
 - Installation of devices until the site is stabilised (i.e. grassed); and
 - Inspection and maintenance schedules for the sediment and dust control measures.
 - A site description, i.e. topography, vegetation, soils, etc;
 - Details of proposed activities;
 - Drawings showing the protection of natural assets and habitats;

- Emergency response and contingency management;
- Procedures for compliance with resource consents and permitted activities;
- 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.

2. The Erosion and Sediment Control Plan shall show the positions of all stockpiles on site. To minimise the spread of contaminated material, all stockpiles of excavated potentially contaminated material shall be located on an impermeable surface within the catchment of erosion and sediment controls for the site. All stockpiles shall be covered with either polythene or an equivalent impermeable material when the site is not being worked and during periods of heavy rain. No stockpiling of material shall be located within the waterway setback.
3. All excavated areas and any excavated soils that will be reused on site shall be sealed or capped or disposed to an authorised facility. All bared surfaces within the waterway setback shall be adequately topsoiled and vegetated as soon as possible to limit sediment mobilisation.
4. Preventative measures shall be installed to ensure there is a minimal amount of contaminants draining into the existing stormwater system adjacent to the construction site during periods of rainfall. (Possible sources of contaminants from construction activities include uncontrolled runoff, dewatering, sawcutting and grooving).
5. No work shall commence on site prior to completion and presentation to Council of an Engineering Completion Certificate (IDS – Part 3, Appendix VII), signed by an appropriately qualified and experienced engineer. This is to certify that the erosion and sediment control measures have been properly installed / put in place / constructed in accordance with ECan’s Erosion and Sediment Control Toolbox for Canterbury for the work proposed on site.
6. The outfalls into the waterway shall be designed to avoid scour and erosion and in accordance with the Wetlands, Waterways Design Guide. Engineering plans, specifications and calculations for the design of the stormwater pipe repairs and outfalls shall be submitted to the Council for engineering acceptance prior to construction.

Yvonne McDonald

Senior Subdivisions Engineer

CC-Planning Team 1, CC-Resource Consents Uni

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Christchurch City Council

<http://www.ccc.govt.nz>

Kelly Andrew

From: Mirabueno, Hannah <Hannah.Mirabueno@ccc.govt.nz>
Sent: Thursday, 1 March 2018 9:04 AM
To: Kelly Andrew
Subject: RE: RMA/2017/3173 For Processing - 20 Station Road_ NES comments

Hi Kelly

This application is partly retrospective due to the fact that earthworks have been carried out prior to lodgement of consent. This consent would also cover all future earthworks on the site.

The detailed site investigation was undertaken outside the buildings, but none was undertaken within the building. Earthworks have been undertaken with the building and also in the outdoor area that were not yet tested. Thus, the earthworks would be discretionary under Reg 11 of the NES because not all of the areas proposed for earthworks have not been investigated.

Some of the excavated material are currently stockpiled on the site which would require removal; some were already backfilled in the trenches that were dug within the building and in the yard. Kirk Roberts have provided further testing results of the biggest stockpile material to determine the appropriate disposal facility. These are recorded as 18/159572. Aside from the main stockpile there are three smaller piles on the site, which would all require disposal. The stockpile soil testing results showed that the soil would meet Burwood acceptance criteria. However, the presence of hardfill in the pile may preclude disposal to Burwood.

Provided the site management plan (SMP) by Kirk Roberts and the recommended conditions below are followed, any risk to human health from the contamination on the site would be less than minor.

Recommended conditions:

1. The applicant shall notify the Council five days before the start of further earthworks. The notification shall be by email to envresourcemonitoring@ccc.govt.nz.
2. All earthworks on site shall be managed in accordance with the Site Management Plan by Kirk Roberts, dated December 2017.
3. On-site environmental monitoring should be undertaken during soil disturbance activities by a suitably qualified and experienced practitioner (SQEP).
4. Any soil that would be removed from the site shall be tested by a SQEP prior to removal to determine the appropriate disposal facility.
5. Any additional soil testing shall be undertaken by a suitably qualified and experienced practitioner (SQEP) on land contamination.
6. To minimise the spread of contaminated material, all stockpiles of excavated potentially contaminated material shall be located on an impermeable surface within the catchment of erosion and sediment controls for the site. All stockpiles shall be covered with either polythene or an equivalent impermeable material when the site is not being worked and during periods of heavy rain.
7. All excavated areas and any excavated soils that will be reused on site shall be sealed or capped or disposed to an authorised facility.
8. All contaminated soils removed from the site will not be suitable to be disposed of at a cleanfill facility and must be disposed of at a facility whose waste acceptance criteria permit the disposal.
9. Evidence of waste disposal such as weighbridge receipts and related testing results should be submitted to the Christchurch City Council's Environmental Health Team within three months of completion of earthworks. This should be emailed to envresourcemonitoring@ccc.govt.nz.
10. In the event of contamination discovery e.g. visible staining, odours and/or other conditions that indicate soil contamination, then work must cease until a Suitably Qualified and Experienced Practitioner (SQEP) has

assessed the matter and advised of the appropriate remediation and/or disposal options for these soils. Any measures to address the discovered soil contamination must be approved by the Christchurch City Council.

11. Within three months of completion of earthworks, the applicant shall supply to the Council an ongoing, long term site management plan that informs the site owners on how any subsequent work on the property that may involve the handling or disturbing of soils, paving or the barrier may be carried out safely. This should be sent by email to envresourcemonitoring@ccc.govt.nz. The long term site management plan shall be approved and accepted by the Council.

Regards
Hannah

Hannah Mirabueno
Environmental Health Officer
Environmental Health Team
Regulatory and Compliance Unit
Christchurch City Council

DDI 03 9415465
Mobile 0277035110
Web www.ccc.govt.nz

Level 3, 53 Hereford Street, Central City, PO Box 73049
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From: Kelly Andrew [mailto:k.andrew@harrisingrierson.com]
Sent: Tuesday, 27 February 2018 2:55 p.m.
To: Mirabueno, Hannah <Hannah.Mirabueno@ccc.govt.nz>
Subject: FW: RMA/2017/3173 For Processing - 20 Station Road

Good Afternoon Hannah,

We have been allocated this consent to process on behalf of Council. This consent (RMA/2017/3173) was initially lodged applying for approval under the NES. Subsequently it was confirmed that consent was also required for earthworks and earthworks within a 10metre setback of the waterway. A separate consent has been lodged in that regard (RMA/2018/337).

Therefore, would you still be able to provide some advice on the NES/Contamination component only? Please call me if easier to discuss in the first instance. This consent is now quite high on working days so if the contamination component is reasonably cut and dry, please let me know?

Thanks,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

D +64 3 421 6162 **P** +64 3 962 9770

**HARRISON
GRIERSON.
COM**

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From: Braddick, Laura [<mailto:Laura.Braddick@ccc.govt.nz>]
Sent: Friday, 22 December 2017 8:34 AM
To: Kelly Andrew <k.andrew@harrisingrierson.com>
Subject: RMA/2017/3173 For Processing - 20 Station Road

Hi Kelly,

A consent for processing for the new year if you can take it?

It's on day 1 (clock has stopped until 11th)

Sent to;

Env Health – NES - Contamination - Hannah Mirabueno as she has provide prior advice
Doru, Engineers - Earthworks - Site within LMA
Stormwater approvals.

Vetting Notes from Kate Askew:

- Application sent to the above specialists for comment, liaise with Laura, if you consider other specialist input required.
- Ask applicant for copies of encumbrance and caveat on title or Laura can obtain at a cost of 5\$ per page to applicant. Their choice.
- Is the installation of underground utilities, permitted? Will separate resource consent be applied for? Determine scope of application.
- Needs assessment against all relevant rules in Christchurch District Plan, including earthworks, natural hazards chapter etc.. don't rely on application as may be additional non-compliances.
- Site located within Industrial Heavy Zone, and adjoins designated land most likely a railway, within LMA outside FMA.
Site also adjoins an upstream waterway, are works within setback in which case advice will be required from Emily Tredinnick.
Greater clarification required re location of trenches/earthworks, stockpiles, existing and proposed ground levels.
Is the AEE adequate, Sct 88 if not.
- Once initial comments from experts received, give me call to discuss if any issues of note arise.
- Keep track of fees, keep applicant informed when deposit exceeded, with regular updates.
- All conditions should be agreed to by the applicant prior to finalising your planning report(s). If required for mitigation need to be volunteered.
- Deposit fee was \$2000

Laura Braddick

Planning Technician
Development Support Team
Consenting and Compliance Group - Resource Consents Unit

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73014, Christchurch, 8154

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Kelly Andrew

From: Askew, Kate <Kate.Askew@ccc.govt.nz>
Sent: Monday, 19 March 2018 3:38 PM
To: Rachel Ducker
Subject: FW: rma2018/337_20 Station_earthworks

Kate Askew

Senior Planner
Resource Consents Unit

Days of Work: Monday, Tuesday and Thursday

DDI: 03 9418263
Web: www.ccc.govt.nz

Christchurch City Council
Civic Offices, 53 Hereford Street, Christchurch
PO Box 73013, Christchurch, 8154

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From: Mirabueno, Hannah
Sent: Thursday, 1 March 2018 9:37 a.m.
To: 'Kelly Andrew' <k.andrew@harrisingrierson.com>
Subject: rma2018/337_20 Station_earthworks

Hi Kelly

I'm sorry but I have to disagree with the assessment in Section 11 (under the Proposal description) that significant volume are considered non-contaminated. Subsequent testing of the stockpile has indicated that they soils have elevated contamination (i.e. above background levels) but below the commercial/industrial standards. These soils are therefore not suitable to be disposed as cleanfill. Majority of the site is largely untested, and these soils would require mitigation measures during disturbance.

I recommend that all earthworks on site should be following the conditions in the NES consent, RMA/2017/3173.

Regards
Hannah

Hannah Mirabueno
Environmental Health Officer
Environmental Health Team

Regulatory and Compliance Unit
Christchurch City Council

DDI 03 9415465
Mobile 0277035110
Web www.ccc.govt.nz

Level 3, 53 Hereford Street, Central City, PO Box 73049
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Kelly Andrew

From: Kim Seaton - Novo Group <kim@novogroup.co.nz>
Sent: Friday, 23 March 2018 3:01 PM
To: Kelly Andrew
Subject: RE: RMA/2017/3137 - Draft conditions for applicant review - NES consent
Attachments: Future Stormwater Earthworks.15.03.2018.pdf; Future Earthworks Plan - 20 Station Road - 08.02.2018.pdf

Hi Kelly

I have met this afternoon with Kirk Roberts to confirm the final earthworks volumes for all earthworks consents. As you are aware, new information has been coming in weekly, including today, as to damage and new piping systems needed and that is well beyond what we originally anticipated and applied for. Fortunately, although volumes have changed and there are new trench locations, the assessment of effects and SMP that we previously provided remain appropriate.

Volumes of soil disturbance for NES application

Retrospective: 290m³ (maximum estimated size of the stockpile), inclusive of both internal and external disturbance.

Future: 5m³ internal structural pad/trade waste excavations + 225m³ external trade waste trench excavation + 295m³ external stormwater trench excavation = 525m³.

The applicant now advises that all material excavated on the site will be removed from the site. So the total volume to be disposed off site will be 815m³.

Attached are the plans showing the location of the stormwater and wastewater trenches that are to be excavated or have been excavated. Also shown are the stockpile locations. The Kirk Roberts report description is now out of date in terms of its description of what is proposed. We do not have plans of internal excavation areas, but suffice to say all are contained within the buildings shown on the attached plans. If that level of detail is required, we can provide some internal schematics.

regards

Kim Seaton

Senior Planner

D: 03 972 5761 | M: 021 662 315 | O: 03 365 5570

E: kim@novogroup.co.nz | W: www.novogroup.co.nz

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <k.andrew@harrisingrierson.com>
Sent: Friday, 23 March 2018 10:07 AM
To: Kim Seaton - Novo Group <kim@novogroup.co.nz>
Subject: FW: RMA/2017/3137 - Draft conditions for applicant review - NES consent

Hi Kim,

Further to below, in terms of the query around condition 2. My outline of the works currently in report is as follows:

The extent of soil disturbance is outlined in section 1.2 of the Kirk Roberts report and in particular includes:

- Seven open trenches excavated at separate locations around the perimeter of the site to enable new networks cables to be thrust through existing ducts;
- One additional 50 x 1.2 x 1.0 m open trench line to be excavated in the eastern outdoor storage yard area to enable the installation of new power cables; and
- A new drainage network to be installed within the existing building footprint.

The total area of soil to be disturbed is approximately 270m³ and 60m³ of soil will be removed from the site. The proposed activity therefore involves disturbing more than 25m² of soil and removal of more than 5m³ of soil from the site (per 500m² of disturbed area).

Could you please amend where necessary to confirm back to Council what is being applied/scope? That's way it is documented and I can included this clarification in Councils report. This might be the best place to include in your response the up to date site plan in relation to this consent.

Regards,
Kelly



KELLY ANDREW
Senior Planner

Level 1, 2degrees House
351 Lincoln Road
Addington, Christchurch 8024

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**HARRISON
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All our emails and attachments are subject to [conditions](#).

From: Kelly Andrew
Sent: Friday, 23 March 2018 10:02 AM
To: 'Kim Seaton - Novo Group' <kim@novogroup.co.nz>
Subject: RE: RMA/2017/3137 - Draft conditions for applicant review - NES consent

Hi Kim,

Also as discussed, please see below recommendation conditions from Councils Environmental Health officer. The yellow are those changes from the first draft conditions I sent through to you on 5th March.

1. The applicant shall notify the Council five days before the start of further earthworks. The notification shall be by email to envresourcemonitoring@ccc.govt.nz.
2. All earthworks on site shall be managed in accordance with the Site Management Plan by Kirk Roberts, dated December 2017.

3. On-site environmental monitoring should be undertaken during soil disturbance activities by a suitably qualified and experienced practitioner (SQEP).
4. Any soil that would be removed from the site shall be tested by a SQEP prior to removal to determine the appropriate disposal facility.
5. Any additional soil testing shall be undertaken by a suitably qualified and experienced practitioner (SQEP) on land contamination.
6. To minimise the spread of contaminated material, all stockpiles of excavated potentially contaminated material shall be located on an impermeable surface within the catchment of erosion and sediment controls for the site. All stockpiles shall be covered with either polythene or an equivalent impermeable material when the site is not being worked and during periods of heavy rain.
7. All excavated areas and any excavated soils that will be reused on site shall be sealed or capped or disposed to an authorised facility.
8. All contaminated soils removed from the site will not be suitable to be disposed of at a cleanfill facility and must be disposed of at a facility whose waste acceptance criteria permit the disposal. Evidence of disposal to authorised facilities shall be included in the site validation report (Refer to Condition 11).
9. In the event of contamination discovery e.g. visible staining, odours and/or other conditions that indicate soil contamination, then work must cease until a Suitably Qualified and Experienced Practitioner (SQEP) has assessed the matter and advised of the appropriate remediation and/or disposal options for these soils. Any measures to address the discovered soil contamination must be approved by the Christchurch City Council.
10. Within three months of completion of earthworks, the applicant shall supply to the Council an ongoing, long term site management plan that informs the site owners on how any subsequent work on the property that may involve the handling or disturbing of soils, paving or the barrier may be carried out safely. This should be sent by email to envresourcemonitoring@ccc.govt.nz. The long term site management plan shall be approved and accepted by the Council.
11. Within three (3) months of the completion of the works, the site validation report shall be prepared by the project's contaminated land specialist and outlining the works undertaken. The site validation report shall include at least the following:
 - a) Statement of the volumes of soil:
 - Disturbed by the works;
 - Disposed offsite and confirmation of disposal facility location;
 - Cleanfill materials imported to site, including any supporting analytical data where appropriate.
 - b) Records of any contaminated land related incidents related to the release of soil contaminants, if any;
 - c) Records of all additional testing results, including their sampling locations; and
 - d) Confirmation that all disturbed areas have been sealed or capped.

Regards,
Kelly



KELLY ANDREW
Senior Planner

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351 Lincoln Road
Addington, Christchurch 8024

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From: Kim Seaton - Novo Group [<mailto:kim@novogroup.co.nz>]
Sent: Thursday, 22 March 2018 2:49 PM
To: Kelly Andrew <k.andrew@harrisingrierson.com>
Subject: RE: RMA/2017/3137 - Draft conditions for applicant review - NES consent

Hi Kelly

Appreciating that Hannah wants to add another condition, which I assume is the same one she discussed with James (environmental validation report requirement?), the previous set of conditions you sent otherwise look generally fine. James though the extra condition might be something like:

Within three months of completion of earthworks, the applicant shall supply to the Council an earthworks completion / validation report which details the extent and volumes of the earthworks undertaken, extent of any contaminated material identified, and documentation relating to final waste disposal locations of all exported material, and copies of dockets of all cleanfill materials imported to site.

James did have a question re condition 2, as to whether it's worth his updating the introductory section of the SMP, to update the earthworks volumes. I said I didn't think it was necessary as the consent document itself will override his minor introductory comments, but let me know if you feel differently.

Re condition 7 I wondered if there's a little bit of uncertainty there around what capping means. In any case, realistically the whole site that is to be disturbed will ultimately be sealed so it may not be an issue. All that will remain is the existing green areas, that aren't to be disturbed other than for planting anyway.

regards

Kim Seaton

Senior Planner

D: 03 972 5761 | M: 021 662 315 | O: 03 365 5570

E: kim@novogroup.co.nz | W: www.novogroup.co.nz

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <k.andrew@harrisingrierson.com>
Sent: Monday, 5 March 2018 8:58 AM
To: Kim Seaton - Novo Group <kim@novogroup.co.nz>
Subject: RMA/2017/3137 - Draft conditions for applicant review - NES consent

Good Morning Kim,

Please find attached draft conditions for the NES consent. Could you please review and confirm you accept or make any comment.

Regards,
Kelly



KELLY ANDREW
Senior Planner

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Addington, Christchurch 8024

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Kelly Andrew

From: Kim Seaton - Novo Group <kim@novogroup.co.nz>
Sent: Wednesday, 28 March 2018 3:52 PM
To: Kelly Andrew
Subject: RE: Draft conditions for RMA/2017/3137 and RMA/2018/337

Hi Kelly
The applicant is prepared to accept both sets of conditions.

regards

Kim Seaton

Senior Planner

D: 03 972 5761 | M: 021 662 315 | O: 03 365 5570

E: kim@novogroup.co.nz | W: www.novogroup.co.nz

Level 1, 279 Montreal Street | PO Box 365 | Christchurch 8140



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From: Kelly Andrew <k.andrew@harrisingrierson.com>
Sent: Tuesday, 27 March 2018 3:22 PM
To: Kim Seaton - Novo Group <kim@novogroup.co.nz>
Subject: Draft conditions for RMA/2017/3137 and RMA/2018/337

Good Afternoon Kim,

Apologies for the delay. I'm yet to get the final confirmation from two of the inputs but the attached is my understanding of the combined recommended conditions from Council specialists. I don't anticipate much change from these therefore please review and discuss with your client. I've used the first document I sent through on 05.03 and tracked changed the additions.

Let me know if anything you'd like to discuss.

Regards,
Kelly



KELLY ANDREW

Senior Planner

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351 Lincoln Road
Addington, Christchurch 8024

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Kelly Andrew

From: Markham-Short, Ruth <Ruth.MarkhamShort@ccc.govt.nz>
Sent: Thursday, 11 January 2018 4:06 PM
To: Kelly Andrew
Cc: Braddick, Laura; Askew, Kate; Rachel Ducker
Subject: FW: RMA/2017/3173_ 20 Station Road_ NES RFI/comments and abatement notice
Attachments: Abatement notice.pdf

Importance: High

Hi Kelly

In Laura's absence, could you please take note of the below / attached in processing the above application. Seems likely you will need to use section 88 to return the application but I'll leave that to you to discuss with Kate A.

Cheers
Ruth

From: Mirabueno, Hannah
Sent: Thursday, 11 January 2018 3:50 p.m.
To: Braddick, Laura <Laura.Braddick@ccc.govt.nz>
Cc: Markham-Short, Ruth <Ruth.MarkhamShort@ccc.govt.nz>
Subject: RMA/2017/3173_ 20 Station Road_ NES RFI/comments and abatement notice

Hi Laura

An abatement notice has been issued on 22/12/2017 for this site which is recorded in 17/1512845. There is also a notice to fix issued on 12/12/2017 for the unconsented building works. These enforcement actions were undertaken after the site has been investigated by CCC.

In the abatement notice, several non-compliances against the District Plan have been identified, specifically, Rules 6.6.4.1, 6.6.4.4 and 8.9.2.1, which were not discussed or mentioned in the application. I have attached a copy of the abatement notice here for the external planner's reference.

A detailed site investigation (DSI) report and a site management plan have been provided, but did not include an AEE.

The DSI report is limited to sampling the area outside the building. At the time of the DSI report writing (12/12/2017), significant excavation has already been undertaken both inside and outside of the warehouse building. Majority of the excavated materials have not been tested. The excavated material have been stockpiled, mostly in the northern portion close to the tanks. These were not acknowledged in the DSI report.

With the excavations already done on the site, I think this is also partly a retrospective consent.

A site management plan (SMP) has also been provided. Similar to the DSI report, the SMP does not report on the current condition of the site i.e. that significant excavations (trenches were dug, transformer area were excavated and filled) have been done or the fact that the stockpiled material were not appropriately stored on the site. Also the SMP should also show remedial works on the disturbed soil and the stockpiled material, as well as include the testing parameters. I'm happy to discuss this further with the agent and/or the land contamination specialist.

Overall, the DSI report and the SMP would need some amendments, and I am keen to know your thoughts on the absence of an AEE.

Please don't hesitate to call to discuss this application.

Regards
Hannah

Hannah Mirabueno
Environmental Health Officer
Environmental Health Team
Regulatory and Compliance Unit
Christchurch City Council

DDI 03 9415465
Mobile 0277035110
Web www.ccc.govt.nz

Level 5, 77 Hereford Street, Central City, PO Box 73049
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Christchurch City Council
<http://www.ccc.govt.nz>

21 December 2017

Our Ref: LEX 19312

The Directors – Feng Liang and Zongren Ling
Cloud Ocean Water Limited
20 Station Road
Belfast
Christchurch

Dear Directors

20 Station Road, Belfast, Christchurch – Abatement Notice

Please find enclosed an abatement notice (**notice**) for the property at 20 Station Road, Belfast. The notice sets out the actions required by you to address the relevant adverse effects on the environment. The notice requires you to:

- **Cease earthworks and filling activities immediately;**
- **Prevent discharge of contaminants by 22 December 2017;**
- **Remove holding tanks from within the waterway setback by 31 January 2018;**
- **Undertake a detailed site investigation of all areas that have been disturbed and provide the results to Council’s Environmental Health Team by 31 January 2018.**

The Council has given some consideration to the work required to comply with the notice and believes that the dates for compliance allow more than a reasonable time to complete the work required. However, there is a number of things that need to be undertaken to comply with the notice and it is therefore essential that you give this matter your immediate attention, including that the relevant contractors and experts are engaged immediately to ensure the compliance dates are met.

Whilst it is acknowledged that there has been some work undertaken by you to mitigate the discharge of contaminants, further urgent work is required. In the very least, the entire stockpile must be covered and sediment socks need to be placed around the entire stockpile to mitigate further discharge.

Further Work

At this stage, Council has not addressed in this notice what will be required to remedy the non-compliances for the earthworks undertaken to date. This is because the actual work to be undertaken is largely dependent on the results of the detailed site investigation.

To remedy the non-compliances and to complete the further work that will be required, it is likely that other areas of the site will be disturbed (excavated or filled) in the future. These areas will also require a detailed site investigation to be carried out and these test results will

Initials PLL
TRIM: 16/

also need to be forwarded to Council (this is also likely to be a requirement for any resource consent application). I would therefore recommend that you give some consideration to this now as you may also want to include these areas in the detailed site investigation already required under this notice.

Once the site investigation results have been provided to Council, Council will communicate with you again setting out its requirements for remedying the non-compliances. A further abatement notice may follow at that time.

Resource Consent(s) Required

When it comes to remediating and/or managing the non-compliances on site, resource consent will be required before you can carry out the necessary work. This will apply even if you are intending to return the land back to its original state. This also includes the fill that is within the 10 metre setback from the Kaputone Creek as no excavation is permitted within the setback area.

At present there is one holding tank within the 10 metre setback from the Kaputone Creek. I understand this tank is sitting on a concrete slab, but I do not know whether this is also secured to the ground in some way, or whether earthworks will be required to remove the tank that will also disturb the ground below. As no earthworks are permitted within the setback area, any excavation required to remove the holding tank, will require a resource consent prior to commencing the work. If resource consent is needed, please notify me immediately as an extension of time for clause 1(b) of the notice may be necessary to allow you to make the application(s).

The removal/relocation of soil is also likely to exceed the permitted levels of disturbance under the *Resource Management (National Environmental Standard for Assessing and Managing Soil to Protect Human Health) Regulations 2011 (NES)* and any resource consent will need to incorporate these NES requirements.

Positive Contamination Results

The notice requires a detailed site investigation to be completed of all areas that have been disturbed, including the stockpile material.

Where the results of the detailed site investigation exceed the NES standards for commercial/industrial land use, then that contaminated land will require remediation or management, and any contaminated soil removed from the site will need to be disposed of in an approved manner.

As already mentioned above, Council will communicate its requirements for compliance at the site after it has received the results of the detailed site investigation.

If you have any queries regarding the notice or this letter, please contact the writer

Yours faithfully



Adrian Lambert
Enforcement Officer
Compliance and Investigations
Regulatory Compliance Unit

adria.lamber@ccc.govt.nz
DDI: 941 5241

Encl

**ABATEMENT NOTICE UNDER SECTION 324 OF THE
RESOURCE MANAGEMENT ACT 1991**

**To: The Directors - Feng Liang and Zongren Ling
 Cloud Ocean Water Limited
 20 Station Road
 Belfast
 Christchurch**

1. The Christchurch City Council (**Council**) gives notice that you must take the following action:
 - a) **Cease all earthworks and filling activities; and**
 - b) **Remove all holding tanks placed within the 10 metre waterway setback from the Kaputone Creek; and**
 - c) **Prevent earth, sediment or contaminants from discharging from the land at 20 Station Road, Belfast, Christchurch into Kaputone Creek in accordance with the principles set out in Environment Canterbury's *Erosion and Sediment Control Guidelines 2007*; and**
 - d) **Undertake a *detailed site investigation* (as defined by the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011) of all areas that have been disturbed to ascertain the levels of contamination and whether further parts of the land have been contaminated and forward the results to the Christchurch City Council Environmental Health Team by emailing envresourcemonitoring@ccc.govt.nz, Attention Hannah Mirabueno, Environmental compliance.**

2. The location to which this Abatement Notice applies is:

The property at 20 Station Road, Belfast, Christchurch, legally described as an estate in Fee Simple comprising of 2.296 hectares more or less being Lot 2 Deposited Plan 35966 (**site**).

3. You must comply with this abatement notice within the following period:
 - a) **Cease all earthworks and filling activities immediately; and**
 - b) **Prevent earth, sediment or contaminants from discharging from the land at 20 Station Road, Belfast, Christchurch into Kaputone Creek in accordance with the principles set out in Environment Canterbury's *Erosion and Sediment Control Guidelines 2007* by 12.00pm Friday 22 December 2017; and**
 - c) **Remove the holding tanks from the waterway setback by 5.00pm Wednesday 31 January 2018; and**

d) Forward the results of the detailed site investigation to the Christchurch City Council Environmental Health Team by emailing envresourcemonitoring@ccc.govt.nz, Attention Hannah Mirabueno, Environmental compliance by 5.00pm Wednesday 31 January 2018.

4. This notice is issued under:

- a) Section 322(1)(a) of the Resource Management Act 1991, which provides that an abatement notice may be served on any person by an enforcement officer requiring that person to cease, or prohibiting that person from commencing, anything done or to be done by or on behalf of that person that, in the opinion of the enforcement officer, contravenes, or is likely to contravene the Resource Management Act 1991, any regulations, a rule in a plan or a proposed plan, or a resource consent or is likely to be noxious, dangerous, offensive, or objectionable to such an extent that it has or is likely to have an adverse effect on the environment and
- b) Section 322(1)(b) of the Resource Management Act 1991, which provides that an abatement notice may be served on any person by an enforcement officer requiring that person to do something that, in the opinion of the enforcement officer, is necessary to ensure compliance by or on behalf of the person with the Resource Management Act 1991, any regulations, a rule in a plan or a proposed plan, or a resource consent, and also necessary to avoid, remedy, or mitigate any actual or likely adverse effect on the environment caused by or on behalf of the person or relating to any land of which the person is the owner or occupier.

5. The reasons for this notice are:

- 5.1 You are the owner of the site;
- 5.2 The site is in the Industrial Heavy zone in the Christchurch District Plan;
- 5.3 Filling and earthworks have been undertaken at the site;
- 5.4 The filling and earthworks that have been undertaken is not a permitted activity under Rule 6.6.4.1 of the Christchurch District Plan;
- 5.5 The filling and earthworks that have been undertaken is a discretionary activity under Rule 6.6.4.4 D1 of the Christchurch District Plan;
- 5.6 Parts of the site have been excavated to a depth of 3 metres;
- 5.7 The earthworks that have been undertaken on the site exceeds the 0.6 metre depth in the permitted activity provisions in 8.9.2.1 (P1) of the Christchurch District Plan;
- 5.8 Fill is being stockpiled on the site;
- 5.9 Contaminated and uncategorised fill is being stockpiled together without appropriate separation or containment;

- 5.10 Part of the site is contaminated and the site is classified on the Hazardous Activities and Industries List (HAIL) site, and listed on the Environment Canterbury Listed Land Use Register (LLUR); and
 - 5.11 The soil disturbance that has taken place at the site has exceeded the permitted activity provisions under Clause 8(3), Permitted Activities Soil Disturbance of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (**NES**);
 - 5.12 The filling, excavation and stockpiling activities have been undertaken for a period of longer than one month and are in breach of Clause 8(3) of the NES;
 - 5.13 Part of the site boundary is immediately adjacent to Kaputone Creek;
 - 5.14 Kaputone Creek is classified as an upstream waterway in the Christchurch District Plan;
 - 5.15 The waterbody setback width for earthworks, buildings and other structures, maintenance and enhancement for an upstream waterway in Rule 6.6.4 of the Christchurch District Plan is 10 metres;
 - 5.16 The fill is being stockpiled on the site within 10 metres of Kaputone Creek;
 - 5.17 Holding tanks containing wastewater and/or contaminants have been placed within the 10 metre setback of Kaputone Creek; and
 - 5.18 There is no resource consent for the breaches of the rules in the Christchurch District Plan set out above.
6. The actions described at paragraph 1 above are necessary to avoid, remedy or mitigate the following actual or likely adverse effects on the environment:
 - 6.1 Actual and potential risks to people and the environment;
 - 6.2 A risk to human health and/or the environment;
 - 6.3 Actual and potential erosion, inundation or siltation that will have an adverse effect on a waterway; and
 - 6.4 Actual and potential effects on the district's water bodies and the natural environment.
 7. If you do not comply with this notice, you may be prosecuted under Section 338 of the Resource Management Act 1991 (unless you appeal and the notice is stayed as explained below).
 8. You have the right to appeal to the Environment Court against the whole or any part of this notice. If you wish to appeal, you must lodge a notice of appeal in form 49 with the Environment Court within 15 working days of being served with this notice.

9. An appeal does not automatically stay the notice and so you must continue to comply with it unless you also apply for a stay from an Environment Court Judge under section 325(3A) of the Resource Management Act 1991 (see form 50). To obtain a stay, you must lodge both the appeal and a stay with the Environment Court.
10. You also have the right to apply in writing to the Christchurch City Council to change or cancel this notice in accordance with Section 325A(4) of the Resource Management Act 1991.
11. The **Christchurch City Council** authorised the enforcement officer who issued this notice. Its address is:


53 Hereford Street, PO Box 73013, Christchurch

12. The enforcement officer is acting under the following authorisation:

Section 38(1)(a) of the Resource Management Act 1991 and is authorised to carry out all of the following functions and powers as an enforcement officer under that Act:

- 12.1 To serve on any person an abatement notice pursuant to Section 322 of that Act.
- 12.2 To carry out at any reasonable time, inspections of any place or structure (except a dwelling house) for any of the purposes set out in Section 332(1) of that Act.
- 12.3 For any purpose connected with the preparation, change, or review of a policy statement or plan;
 - (a) to carry out surveys, investigations, tests or measurements;
 - (b) to take samples of any water, air, soil, or vegetation;
 - (c) to enter or re-enter land (except a dwelling house) –

at any reasonable time with or without such assistance, vehicles, appliances, machinery, and equipment as is reasonably necessary for that purpose pursuant to Section 333 of that Act.
- 12.4 To issue and/or serve on any person an infringement notice pursuant to Section 343C of that Act.



Adrian Lambert
Enforcement Officer
Compliance and Investigations
Regulatory Compliance Unit

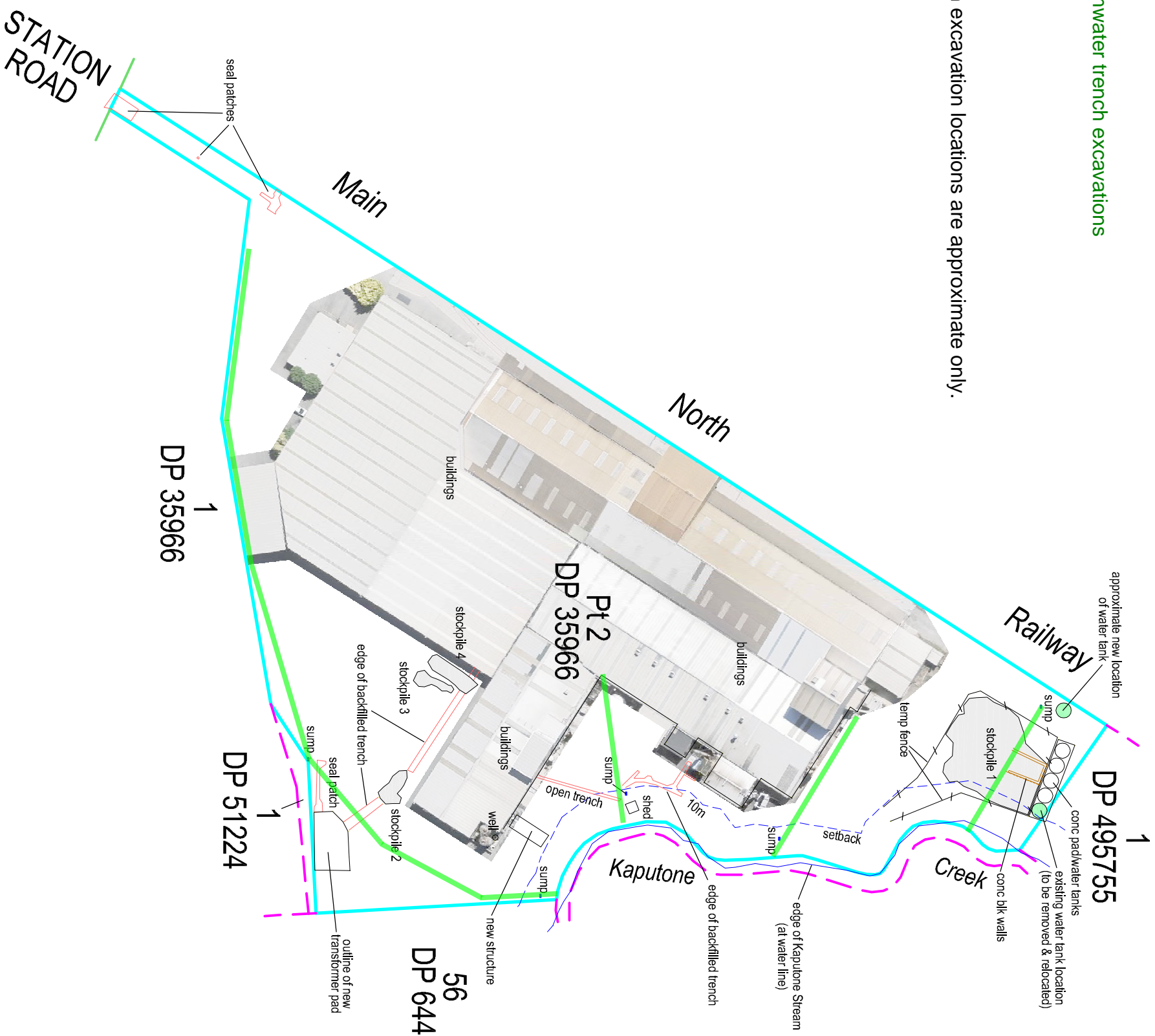
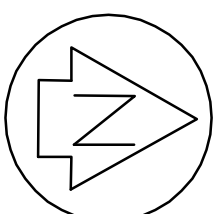
21 December 2017

LEGEND:

Proposed stormwater trench excavations

NOTES

1) Stormwater trench excavation locations are approximate only.



- NOTES:**
1. THIS SURVEY HAS NOT INCLUDED SITE MARKING OF THE BOUNDARY POSITIONS UNLESS OTHERWISE INDICATED.
 2. NO UNDERGROUND SERVICE INFORMATION IS SHOWN ON THIS PLAN. THE LOCATION OF ANY SUCH SERVICES SHOULD BE CONFIRMED WITH THE RELEVANT LOCAL AUTHORITY OR UTILITY SERVICE PROVIDER.

STOCKPILE VOLUMES

- STOCKPILE 1 = 310m³
- STOCKPILE 2 = 8m³
- STOCKPILE 3 = 6m³
- STOCKPILE 4 = 26m³

N.B. Stockpile volumes noted here do not account for a reduction factor for bulking.

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AMBERLEY 03 314 9200
ASHBURNTON 03 307 7021
DUNEDIN 03 318 8151

REV	DATE	REVISION DETAILS
A	30/07/18	SITE SURVEY

DRAFTED	VERIFIED
SRS	
DATE	DATE

PROJECT	
KIRK ROBERTS - 20 STATION ROAD, BELFAST	
TITLE	SITE SURVEY
SHEET 1 OF 1	

INFORMATION ONLY	
PROJECT NO	13736
SCALE	1 : 1250 (A3)
DRAWING NO	SS-01
REV	A

FUTURE EARTHWORKS PLAN.

08/02/2018.

REVISION	DATE	DESCRIPTION
E	13/12/2017	REVISED CONSENT
AMENDMENT	DATE	

CHECK ALL INFORMATION ON SITE PRIOR TO COMMENCING WORK. READ IN CONJUNCTION WITH THE SPECIFICATION AND OTHER RELEVANT DRAWINGS AND DOCUMENTS



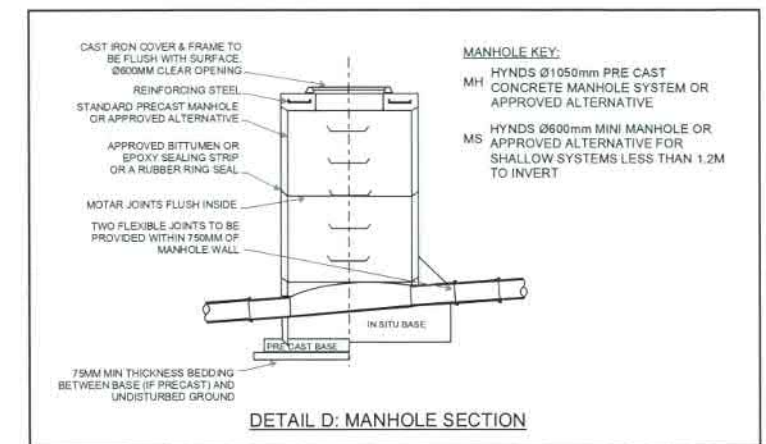
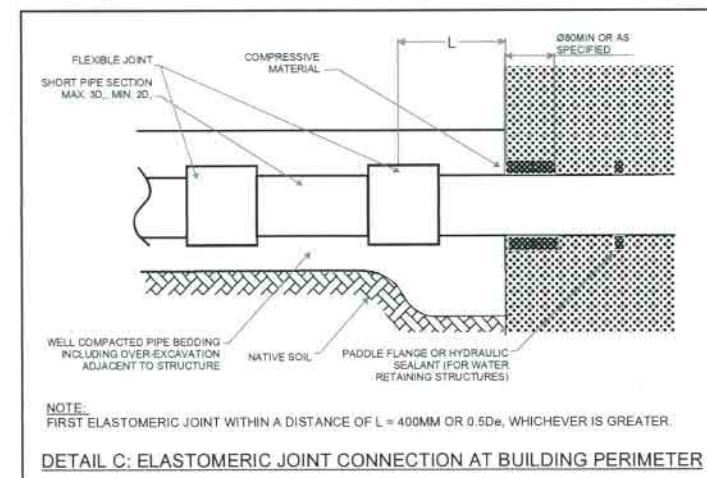
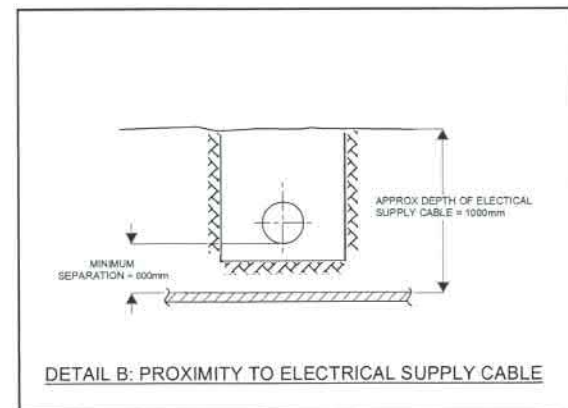
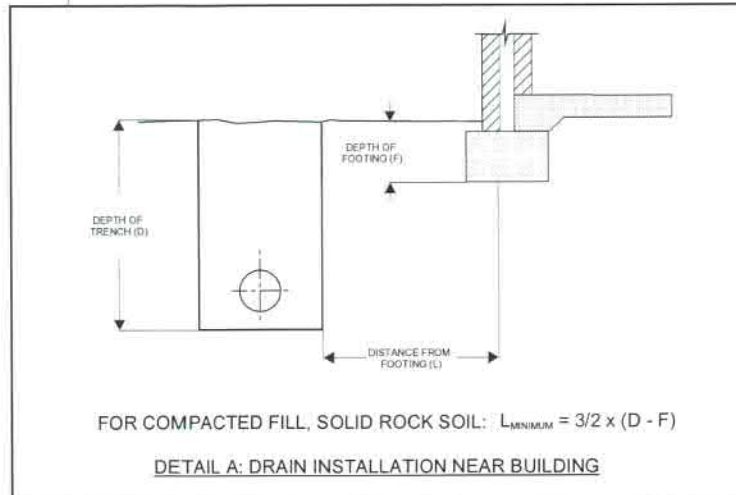
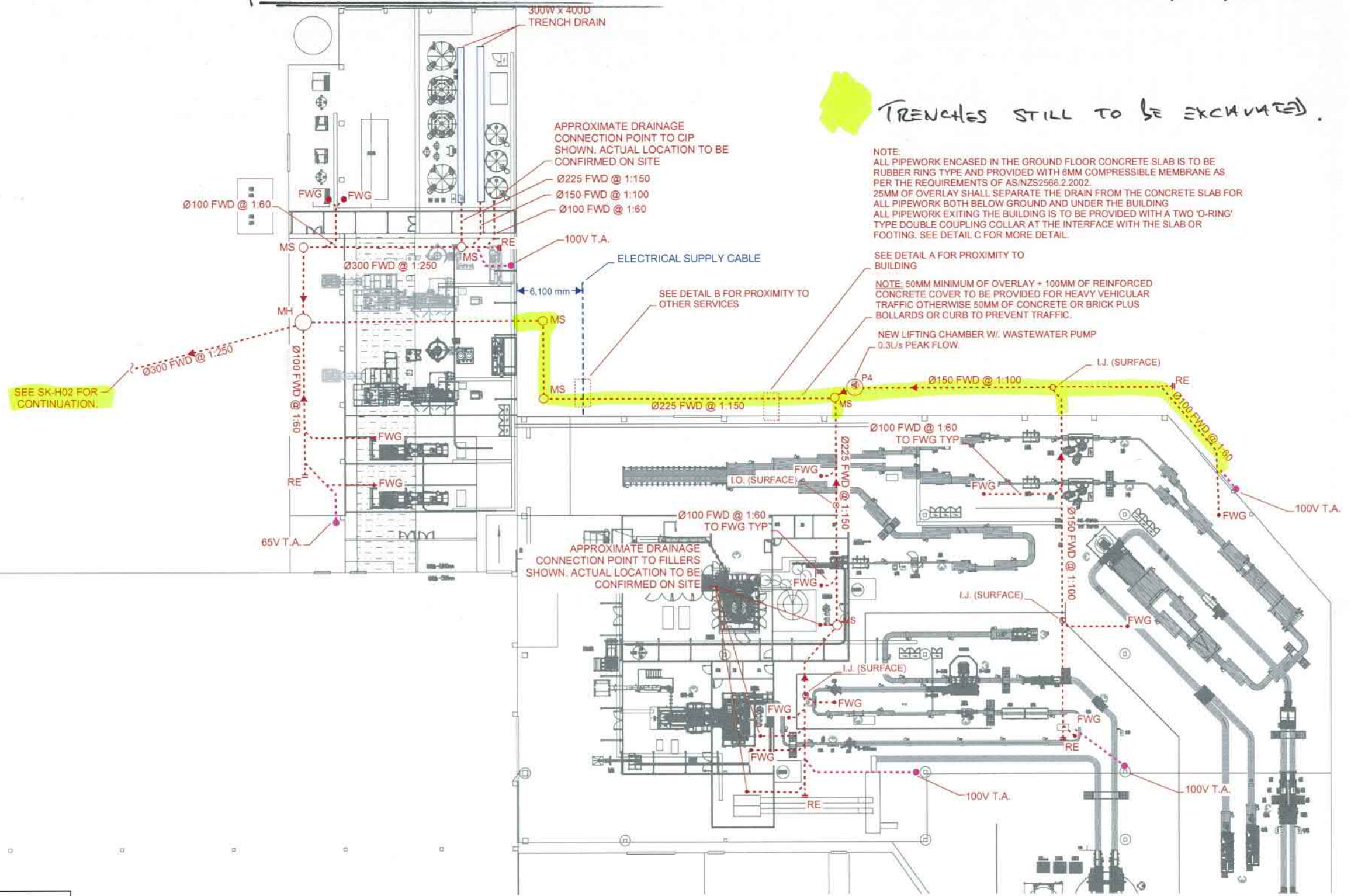
First Floor, 96 Teater St, PO Box 842
Christchurch, New Zealand. Ph. (03) 977 8800
Email: admin@cosgroves.com

PROJECT:
CLOUD OCEAN WATER BOTTLING PLANT

SHEET TITLE:
SANITARY SERVICES

REVISED CONSENT

DESIGNED BY	DATE	SCALE	ISSUE
SH	2/11/17		E
DRAWN BY			
SH		NTS	
SHEET NO.	CC17182-SK-H01		

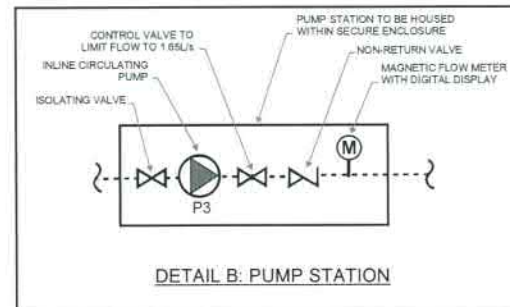
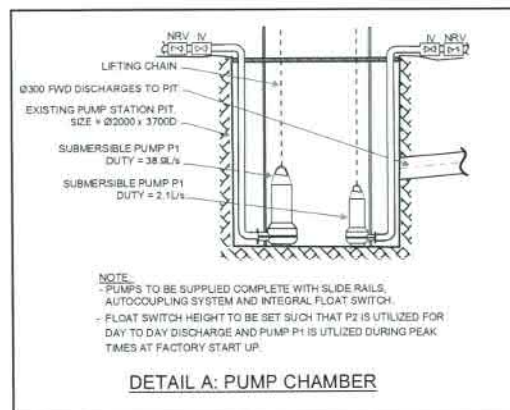
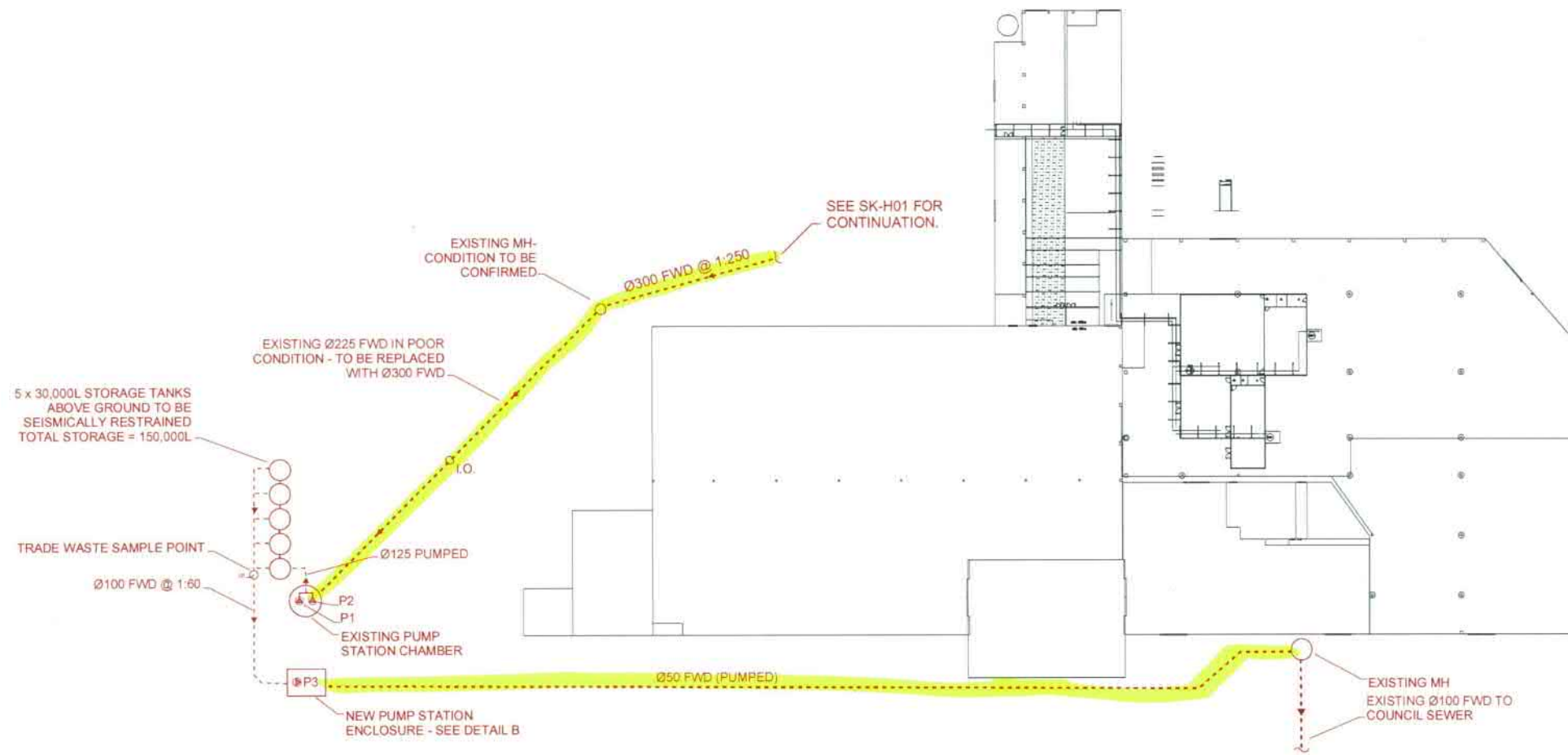


E	REVISED CONSENT	13/12/2017
ISSUE	AMENDMENT	DATE

CHECK ALL INFORMATION ON SITE PRIOR TO COMMENCING WORK. READ IN CONJUNCTION WITH THE SPECIFICATION AND OTHER RELEVANT DRAWINGS AND DOCUMENTS

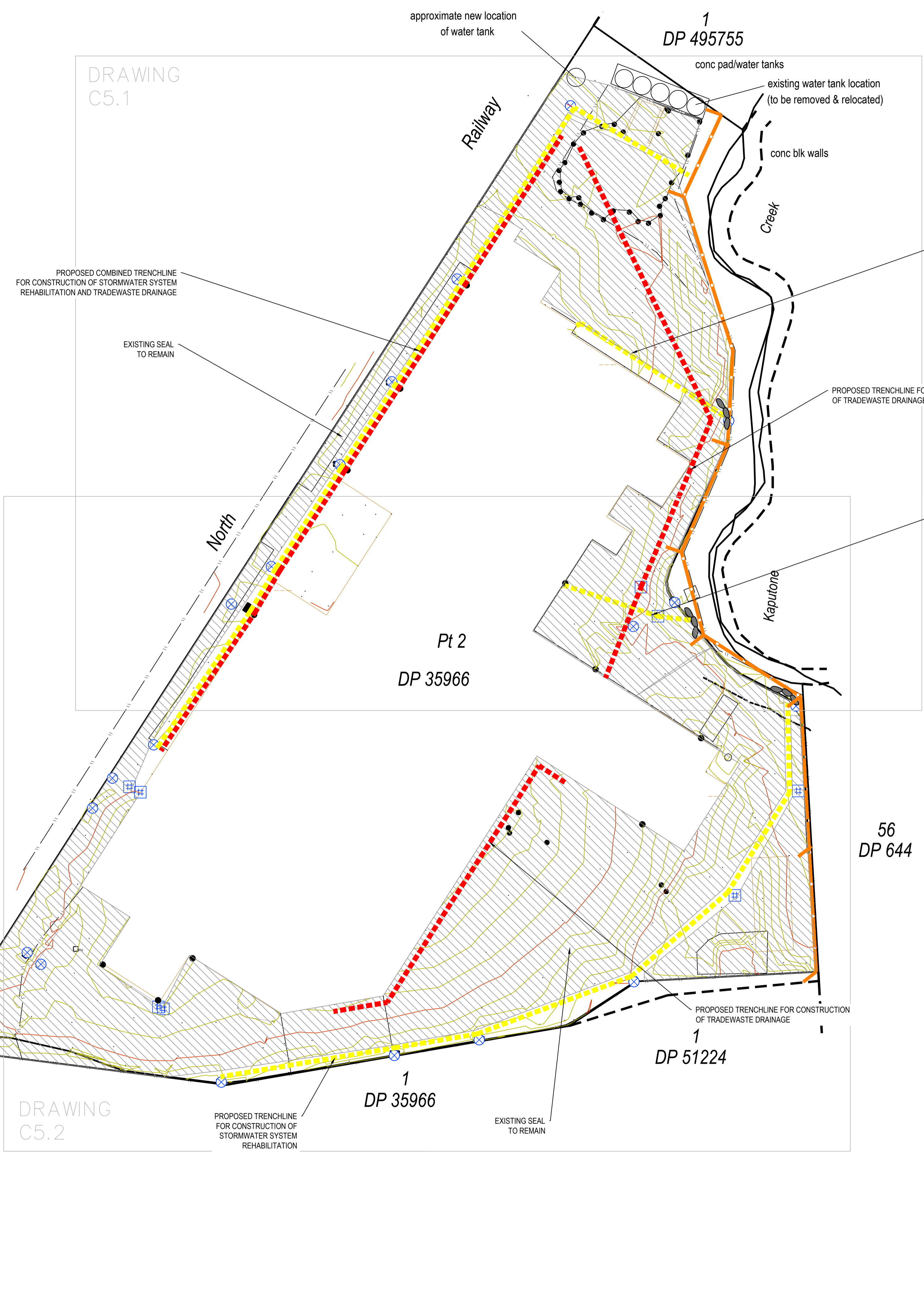


PROJECT: CLOUD OCEAN WATER BOTTLING PLANT
SHEET TITLE: SANITARY SERVICES
REVISED CONSENT
DESIGNED BY: SH DATE: 2/11/17 ISSUE: E
DRAWN BY: SH SCALE: NTS
SHEET No: CC17182-SK-H02





SEDIMENT & EROSION CONTROL NOTES
 THIS SEDIMENT CONTROL PLAN PROVIDES THE KEY DESIGN OUTLINE FOR THE SEDIMENT AND EROSION CONTROL MEASURES TO BE PROVIDED ON SITE. IT IS NOT POSSIBLE AT INITIAL DESIGN STAGE TO ANTICIPATE AND INCLUDE ALL SITE-SPECIFIC DESIGN DETAILS, AS SOME DETAIL CAN ONLY BE INCLUDED ON THE BASIS OF IN SITU MONITORING AND ADJUSTMENTS.
 IN ORDER TO BE EFFECTIVE ON SITE THE PLAN WILL NEED TO BE IMPLEMENTED BY A CONTRACTOR EXPERIENCED IN SEDIMENT AND EROSION CONTROL, WHO WILL BE REQUIRED TO MONITOR ITS PERFORMANCE AND MAKE SPECIFIC ADJUSTMENTS TO ITS DETAIL TO RESPOND TO SPECIFIC CONDITIONS ON SITE AND CHANGES TO THOSE CONDITIONS.
 IT IS NOT SUITABLE FOR UNMONITORED OR UNMANAGED IMPLEMENTATION OR IMPLEMENTATION BY PERSONNEL WHO LACK APPROPRIATE EXPERTISE AND EXPERIENCE IN EROSION AND SEDIMENT CONTROL. WE REQUIRE THAT THE SEDIMENT CONTROL PLAN BE MONITORED BY AN ON-SITE MANAGER OR CONTRACTOR APPROPRIATELY EXPERIENCED IN SEDIMENT AND EROSION CONTROL, WHO IS TO MAKE SUCH ADJUSTMENTS AS ARE NECESSARY TO ENSURE ITS EFFECTIVE OPERATION IN VIEW OF THE FEATURES, THE CONDITION OR STATE OF THE SITE OR CHANGES TO CONDITIONS ON SITE.
 ALL SEDIMENT MEASURES SHALL FOLLOW THE 2007 ENVIRONMENT CANTERBURY EROSION AND SEDIMENT CONTROL GUIDELINES.



NOTES:
 KIRK ROBERTS TAKES NO RESPONSIBILITY FOR THE SETOUT AND DIMENSIONS WHEN IT IS NOT DIMENSIONED ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND ALL OTHER PROJECT DOCUMENTATION, ANY DISCREPANCIES SHALL BE NOTIFIED PRIOR TO STARTING CONSTRUCTION
 CONTRACTOR TO VERIFY: ALL DRAWINGS ARE THE LATEST CONSTRUCTION ISSUE ALL DIMENSIONS PROVIDED ON SITE PRIOR TO COMMENCING ANY WORK

PROJECT
20 STATION ROAD
BELFAST

CLIENT
CLOUD OCEAN WATER LTD

TITLE
OVERALL SEDIMENT AND
EROSION CONTROL PLAN

REVIEWED BY RAB 21-03-2018

DESIGNED BY DL

DRAWN BY MP

SCALE 1:500@A1 JOB NO. 1710455

DRAWING NO. REV.

C5.0 1

FOR CONSENT



Cadd File: Z:\PROJ\2017\1710455-20_STATION_ROAD\3_DELIVERY\8_DRAFT\CIL\1710455_CIVIL_SITE_PLAN\DWG_Plot Date: 3/22/2018 11:30:49 AM Name: Russell Brents Xref:

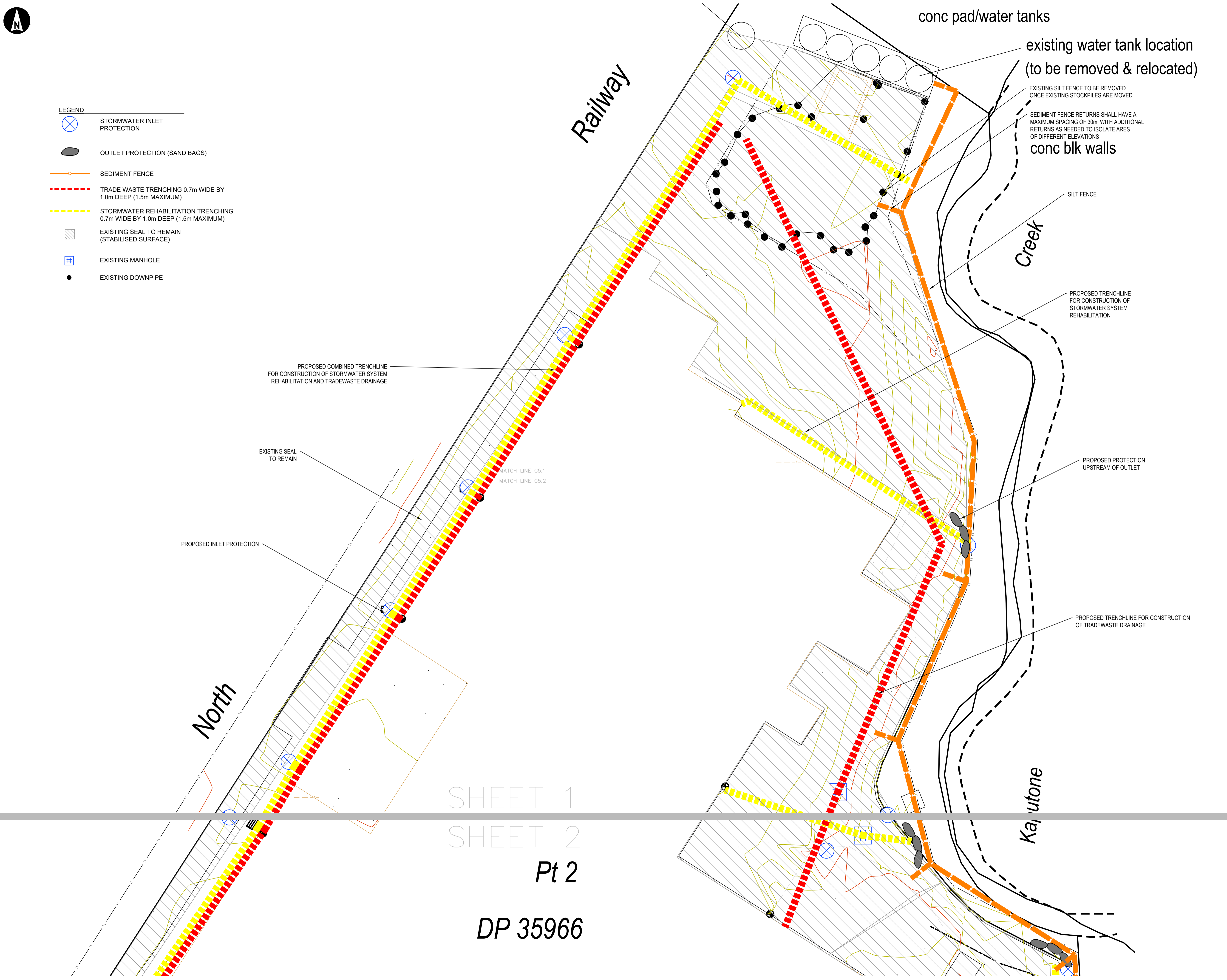


NOTES:

KIRK ROBERTS TAKES NO RESPONSIBILITY FOR THE SETOUT AND DIMENSIONS WHEN IT IS NOT DIMENSIONED ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND ALL OTHER PROJECT DOCUMENTATION, ANY DISCREPANCIES SHALL BE NOTIFIED PRIOR TO STARTING CONSTRUCTION

CONTRACTOR TO VERIFY: ALL DRAWINGS ARE THE LATEST CONSTRUCTION ISSUE ALL DIMENSIONS PROVIDED ON SITE PRIOR TO COMMENCING ANY WORK

- LEGEND**
- STORMWATER INLET PROTECTION
 - OUTLET PROTECTION (SAND BAGS)
 - SEDIMENT FENCE
 - TRADE WASTE TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - STORMWATER REHABILITATION TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - EXISTING SEAL TO REMAIN (STABILISED SURFACE)
 - EXISTING MANHOLE
 - EXISTING DOWNPIPE



SHEET 1

SHEET 2

Pt 2

DP 35966

PROJECT
20 STATION ROAD
BELFAST

CLIENT
CLOUD OCEAN WATER LTD

TITLE
SEDIMENT & EROSION CONTROL
PLAN (SHEET 1 OF 2)

REVIEWED BY RAB 21-03-2018

DESIGNED BY DL

DRAWN BY MP

SCALE 1:250@A1 JOB NO. 1710455

DRAWING NO. C5.1 REV. 1

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CONTRACTOR TO VERIFY: ALL DRAWINGS ARE THE LATEST CONSTRUCTION ISSUE ALL DIMENSIONS PROVIDED ON SITE PRIOR TO COMMENCING ANY WORK

SHEET 1
SHEET 2

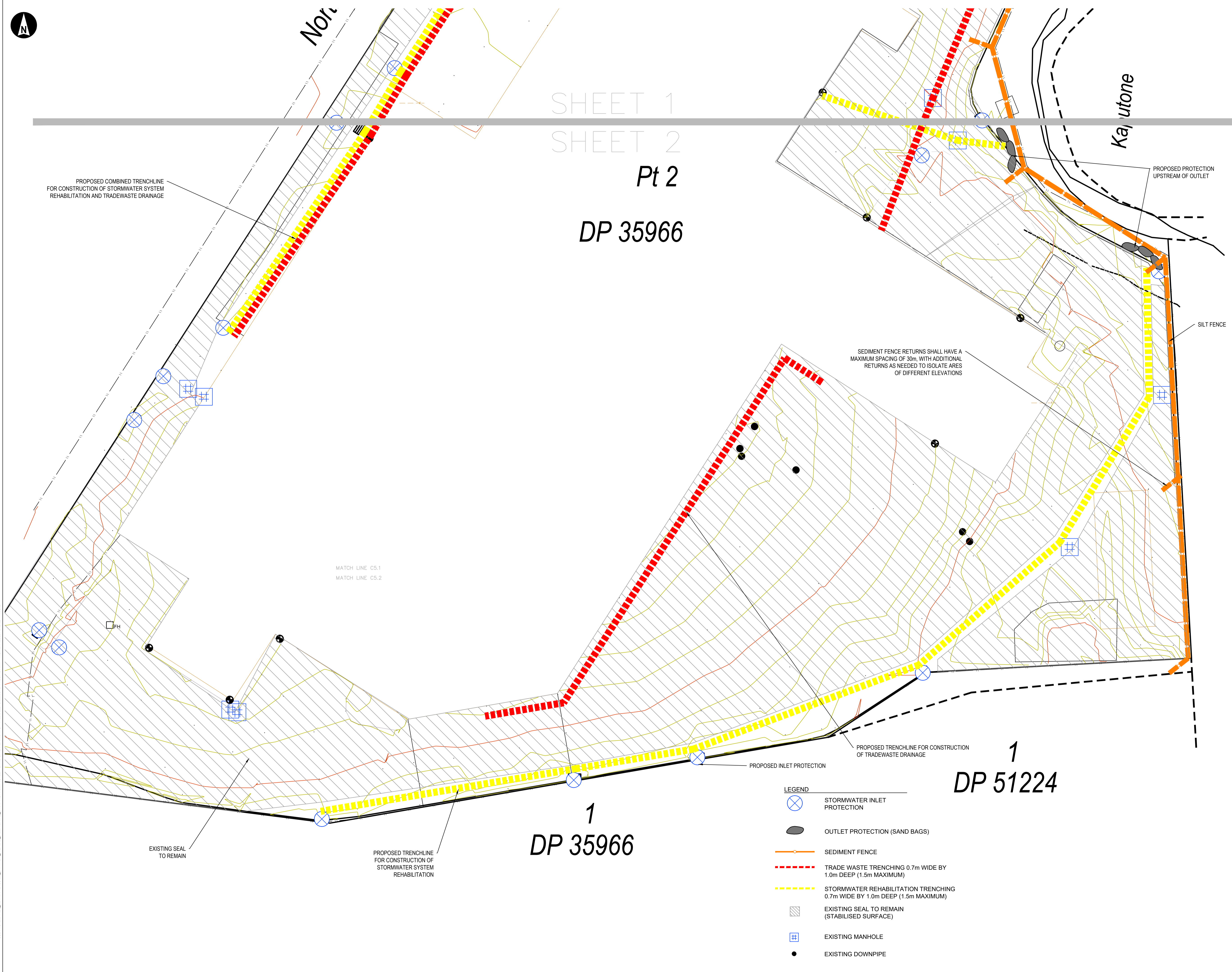
Pt 2

DP 35966

1
DP 35966

1
DP 51224

- LEGEND**
- STORMWATER INLET PROTECTION
 - OUTLET PROTECTION (SAND BAGS)
 - SEDIMENT FENCE
 - TRADE WASTE TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - STORMWATER REHABILITATION TRENCHING 0.7m WIDE BY 1.0m DEEP (1.5m MAXIMUM)
 - EXISTING SEAL TO REMAIN (STABILISED SURFACE)
 - EXISTING MANHOLE
 - EXISTING DOWNPIPE



Cad File: Z:\PROJ\2017\1710465-20 STATION ROADS DELIVERY DRAFT\1710465 - CIVIL SITE PLANNING - Pk Date: 3/22/2018 11:28:46 AM Name: Russell Brents Xref:

PROJECT		
20 STATION ROAD BELFAST		
CLIENT		
CLOUD OCEAN WATER LTD		
TITLE		
SEDIMENT & EROSION CONTROL PLAN (SHEET 2 OF 2)		
REVIEWED BY	RAB	21-03-2018
DESIGNED BY	DL	
DRAWN BY	MP	
SCALE	1:250@A1	JOB NO. 1710455
DRAWING NO.	C5.2	REV. 1
FOR CONSENT		