

19 November 2014



Hurunui District Council
Attn To: Bruce Yates
PO Box 13
Amberley 7441

Customer Services
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PO Box 345
Christchurch 8140

P. 03 365 3828
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www.ecan.govt.nz

Dear Sir/Madam

NOTICE OF RESOURCE CONSENT DECISION

RECORDNO: CRC082988

RECORD HOLDER: Hurunui District Council

Please find enclosed the final resource consent documents for your retention, following the decision on the appeal from the Environment Court.

A resource consent document is an important legal document. Please study the document to ensure you understand: what activity is authorised, and the obligations of a consent holder to comply with any conditions.

You can find online information about your consent document at <http://ecan.govt.nz/publications/General/YourConsentDocumentBooklet09.pdf> and also information regarding the monitoring of your consent at <http://ecan.govt.nz/publications/General/monitoring-your-consent-booklet.pdf>. These booklets contain important information about your consent and answers some commonly asked questions about what will happen next in the life of your resource consent. There is an Annual Compliance Monitoring Charge associated with every consent. For details of this, please refer to page 10 of the "Monitoring Your Consent" booklet.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

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

Our Ref: CO6C/28206
Your Ref:
Contact: Customer Services

For all queries please contact our Customer Services Section by telephoning 03) 353 9007, 0800 ECINFO (0800 324 636), or email ecinfo@ecan.govt.nz quoting the CRC number above.

Yours sincerely

A handwritten signature in black ink, appearing to be 'J. S.', written in a cursive style.

CONSENTS PLANNING SECTION

RESOURCE CONSENT CRC082988

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO: Hurunui District Council
A DISCHARGE PERMIT: To discharge stormwater.
COMMENCEMENT DATE: 16 Oct 2014
EXPIRY DATE: 05 Feb 2048
LOCATION: Amberley Township, AMBERLEY

SUBJECT TO THE FOLLOWING CONDITIONS:

- 1 For the purpose of this consent the following definitions and abbreviations apply to all conditions:
 - a. AEP shall mean the Annual Exceedance Probability for a rainfall event and duration for a catchment.
 - b. Critical rainfall storm event duration is the rainfall duration which causes the worst case runoff/stream flow at a given location within the catchment for the family of events with the same AEP.
 - c. Development Area means any individual area within a site or sites that is undergoing development and construction activities.
 - d. E&SCG shall refer to the content of the “Erosion and Sediment Control Guidelines” published by Environment Canterbury February 2007 Report No. R06/23 ISBN No. 1-86937-607-2 including revisions and updates.
 - e. E&SCP shall mean a plan which is prepared for the site which details methods, techniques and outcomes for the management of soil erosion and sediment control on the site.
 - f. HDC shall mean the Hurunui District Council or their authorised agents
 - g. Industrial site means:
 - i. Any premises used for any industrial or trade purposes; or
 - ii. Any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purposes, or used for composting organic materials; or
 - iii. Any other premises from which a contaminant is discharged in connection with any industrial or trade process—

- iv. But does not include any production land.
- h. Manager shall mean the Canterbury Regional Council Regional Manager Monitoring and Compliance.
- i. NRRP means the operative Canterbury Natural Resources Regional Plan (June 2011).
- j. Recognised Design Guidelines for the purpose of Condition (14) means the Auckland Regional Council Stormwater Management Devices Design Guidelines Manual, May 2003, Technical Publication No. 10; and/or Christchurch City Council Waterways Wetland and Drainage Guide Part B Design February 2003.
- k. Site means an allotment title and any balance of land or adjacent land or allotment titles held by the same owner or ownership with an affiliated interest, for example a family trust or company.
- l. Stormwater means runoff that has been channelled, diverted, intensified or accelerated by human modification of the land surface or runoff from the external surface of any structure as a result of precipitation or from routine wash-down practices and may contain contaminants (for instance, traces of hazardous substances). This definition excludes discharges of spilled or deliberately released hazardous substances and the subsequent wash-down of such spills or releases. Any unacceptable wash-down practices will be identified as part of the Industrial Site Audit process and be addressed via that process.
- m. Stormwater drainage network means the water courses included in the SMP and as shown on Plan CRC082988C attached to this consent, and includes the reticulated piped network, ground infiltration capacity within the SMA by either engineered soakage or injection, kerb and channel, sumps, pipes, manholes, rapid soakage chambers and any stormwater conveyance and mitigation system for which Hurunui District Council (HDC) has approved or is responsible for including their operation, maintenance and upgrade or has accepted to discharge into its stormwater infrastructure.
- n. SMA shall mean the HDC Stormwater Management Area, as delineated on Map CRC082988A.
- o. SMP means the HDC Stormwater Management Plan.
- p. SMS means the Stormwater Management Scheme is as proposed in the HDC SMP (2010), and includes the stormwater drainage network within the SMA and stormwater conveyance infrastructure essential for the disposal of stormwater in the Amberley locale.
- q. The phrase "up to and including" an AEP event stated in a condition means the fifty (50), twenty (20), ten (10) and two (2) percent AEP events (except where they are a smaller percentage than the stated AEP event), for the critical duration of the local catchment and the receiving environment.

Scope

- 2 The discharge shall be only stormwater discharged from the area identified as the SMA as shown on Plan CRC082988A, which forms part of this consent, including stormwater that:
 - a. Enters the HDC SMS and is subsequently discharged onto or into land or into surface water or groundwater or into the stormwater drainage network. This excludes legal discharges or discharges from areas adjacent to the SMA, but reticulated into the HDC SMS.
 - b. Is from roofs or non-trafficable hardstand of individual properties, and is discharged onto or into land via one of the preferred options as described in Table 2 of the SMP, which forms part of this consent.
 - c. Is generated from the SMA and is pre-treated to remove contaminants before discharge into the HDC SMS, but excludes discharges from the areas specified in Condition (3).

- 3 Notwithstanding Condition (2) discharges from sites in one or more of the following categories are excluded from this consent:
 - a. Sites on which activities or industries listed in Schedule WQL9 of the Natural Resources Regional Plan are occurring, which forms part of this consent;
 - b. Sites that have been registered by the Canterbury Regional Council on its Listed Land Use Register (LLUR) as 'not investigated', 'below guideline values for', 'managed for', 'partially investigated', 'significant adverse environmental effects' or 'contaminated for';
 - c. Sites that are located on, or adjacent to, land that has been historically used as a landfill; and
 - d. Sites for which a legal stormwater consent is currently held.

Advice note: *Although discharges from the sites listed above may not discharge under this consent, discharges from those sites may discharge via the system authorised under this consent provided that separate resource consent for the site is obtained and the HDC has authorised the discharge into the system.*

Environmental Outcomes

- 4 For rainfall events up to and including a two (2) percent AEP event, any increase in stormwater volume in excess of pre-development (2007) volumes discharging into the SMS from the SMA, shall continue to discharge via the primary flow path from the catchment from which it originates.

- 5 Any overland flow paths required to comply with condition 4 shall be designed to avoid flooding the floors of habitable buildings for rainfall events up to and including the two (2) percent AEP event.

- 6 Teviots Drain and Dry Gully (downstream of Treviots drain to Hursley Terrace Road), and the receiving waterway from 'Pond 63' to Goldminers Gully, as identified in the Amberley Catchment Study Catchment Overview Map dated 4 August 2014, shall:
- a. have the capacity to convey stormwater resulting from rainfall events up to and including a ten (10) percent AEP event; and
 - b. provide a flow path for any increased stormwater flows occurring in excess of pre-development (2007) flows for rainfall events up to and including a (2) percent AEP event.
- 7 Any overland flow paths modified or formed to enable compliance with condition 6 shall be designed to avoid flooding the floors of habitable buildings for rainfall events up to and including the two (2) percent AEP event.
- 8 If works are required to be carried out by the consent holder to comply with condition 6 and the works are on private land, the works shall be subject to either the consent holder obtaining the approval of the landowner, or the application of relevant statutory powers. If landowner approval is not given, the consent holder shall use all reasonable endeavours, including the use of statutory powers, to enable the consent holder's works to be undertaken. The consent holder's works shall be constructed within: 18 months of obtaining the approval of the landowner; or 18 months of gaining rights through the application of the relevant statutory powers; or such other timeframe as agreed between the consent holder and Canterbury Regional Council.
- 9 Within the SMA, those parts of the stormwater drainage network (including detention basins from new development areas) which are constructed after the commencement of this consent shall:
- a. have the capacity to convey stormwater from the contributing SMA catchment for rainfall events up to and including a ten (10) percent AEP event; and
 - b. provide overland flow paths for secondary flows for rainfall events, in excess of a ten (10) percent AEP event and up to the two (2) percent AEP event, away from the floors of habitable buildings; and
 - c. provide peak flow attenuation for rainfall events up to a two (2) percent AEP event for discharges into surface water so that post development peak flow does not exceed pre-development (2007) peak flows; and
 - d. for discharges into land and for the purposes of complying with condition 9(c), provide retention for all rainfall events either:
 - i. up to a two (2) percent AEP event where no downstream attenuation is constructed as part of the SMS; or
 - ii. up to a ten (10) percent AEP event, where the downstream attenuation is available within the SMS, that provides peak flow attenuation in accordance with condition 9(c).

- 10 All stormwater discharges into the SMS from the SMA shall be treated to a standard within the SMA such that the total suspended solids:
- a. in the treated stormwater discharge from each stormwater treatment device; or
 - b. from the most downstream device (where multiple devices are constructed in series);
- are less than 100 grams per cubic metre of treated stormwater.
- 11 The maximum discharge to surface water for surface water flows from the SMA discharging to:
- a. the natural depression immediately downstream of the pond 63 catchment (as shown on Plan CRC082988A) shall be calculated according to condition 18(a);
 - b. areas other than provided in condition 11(a), shall not increase the peak flow in the receiving waterway in excess of pre-development (2007) flows for rainfall events up to and including the two (2) percent AEP event.
- 12 Design of all devices shall allow for a 16 percent increase in rainfall intensities due to climate change over the consent duration.

Advice Note: Condition 12 is intended to require that all future stormwater devices (ie future parts of the stormwater drainage network as defined herein) shall be designed to meet the terms of this consent both in the specified future climate change scenario and in the current scenario. In some instances an interchangeable outlet orifice plate or similar may be required on basin outlets in order to adjust the design from current compliant operation to achieve future climate change compliance.

Stormwater System Design

- 13 The stormwater management scheme will be implemented in general accordance with any current SMP for Amberley Township.

The consent holder may propose amendments to the SMP for Amberley Township at any time. Any amendment to the current SMP for Amberley Township may not replace the current version until it has been certified by the Manager as being in accordance with best practice (as practicable) and the consent conditions.

- 14 Stormwater management devices shall be designed to meet the requirements of Condition (9), in accordance with Table 2 of the SMP, and in general accordance with recognised stormwater management design guidelines.

Discharge onto and into ground

- 15 Discharges to ground from any source shall comply with the following:
- a. The discharge shall not cause stormwater from up to and including a 24 hour duration two (2) percent AEP rainfall event to enter any other property beyond the boundary of the property or area in which the discharge occurs, unless written authorisation from the affected landowner is obtained;
 - b. The discharge shall not result in the ponding of stormwater on the ground for more than 48 hours after cessation of rainfall in events up to and including the 2% AEP event;
 - c. The discharge shall not exacerbate erosion of soil up to and including the 10% AEP event;
 - d. Prior to constructing devices that will discharge stormwater to ground an investigation shall be carried out to determine that the device will be capable of discharging stormwater at that location; and
 - e. If the stormwater disposal is into an aquifer where a potable supply groundwater bore currently draws from, then a minimum distance shall be maintained between the disposal point and the well of 50 metres for sources solely from a roof or 100 metres from other sources.
- 16 Discharges to ground solely from a roof, non-trafficable residential hardstand or a combination thereof shall comply with the following:
- a. Prior to constructing soakpits that will dispose of roof stormwater or non-trafficable residential hardstand stormwater an investigation shall be carried out to determine that the depth to groundwater at the location is sufficient to establish that the highest groundwater level that can be reasonably expected at the location will be no higher than the base of the soakpit; and
 - b. The discharge system shall be sealed to prevent any other contaminants entering the system; and
 - c. The discharge shall not be from an exposed Zinc coated (Galvanized) Roof; and
 - d. A secondary flow path to a HDC SMS surface water discharge system shall be provided for up to the two (2) percent AEP.
- 16(A) Discharges to ground that are:
- a. Solely from a sealed road or trafficable residential hardstand; or
 - b. From a combination of sources other than a combination of roof and non-trafficable residential hardstand;

and are location in an area where the depth to unconfined or semi-confined groundwater is less than six metres as indicated in Map Volume - Part 2 Indicative Maps, shall either be via a fully vegetated soil treatment system with the following characteristics:

- i. A minimum depth of 200 millimetres of soil; and
- ii. An infiltration rate between 20 and 50 millimetres per hour; and
- iii. At least (5) percent clay content in the soils; and
- iv. Be designed to capture and infiltrate all contributing stormwater for rainfall events up to and including a 24 hour duration ten (10) percent AEP event; and
- v. The discharge device (excluding discharge devices downstream of the first flush pond), shall be located at least one metre above the highest groundwater level that can be reasonably established for the site; and
- vi. Provide for a secondary flow path to a HDC SMS surface water discharge system up to and including the two (2) percent AEP event;

or via an alternative stormwater treatment system that is certified in writing by a Chartered Professional Engineer as providing at least equivalent stormwater treatment. A copy of that certification, design plans for the system and appropriate technical documentation that demonstrates the technical basis for the certification shall be provided to the Canterbury Regional Council at least 20 working days prior to installation.

Discharge into surface water

- 17 Stormwater management systems discharging into surface water shall have the following design features:

- a. A treatment train approach consisting of conveyance swales, first flush basins and detention basins;
- b. The first flush basin shall be designed to treat the first 20 millimetres of rainfall runoff from the catchment; and
- c. Stormwater flow detention basins shall have the capacity to attenuate a 24 hour two (2) percent AEP rainfall event development area catchment runoff without any attributing infiltration into ground within the detention basin;

or be an alternative stormwater management system that is certified in writing by a Chartered Professional Engineer as providing at least equivalent stormwater management. A copy of that certification, design plans for the system and appropriate technical documentation that demonstrates the technical basis for the certification shall be provided to the Canterbury Regional Council at least 20 working days prior to installation.

18 Discharges into surface water must comply with the following:

- a. The consent holder shall for devices discharging into the Goldminers Gully catchment, either
 - i. Ensure that the peak flow discharge is less than 80 percent of the pre-development (2007) peak flow discharge from the site/development catchment events up to and including a two (2) percent AEP event; or
 - iii. Ensure that the maximum peak flow discharge rate into the SMS complies with the following calculation:
 - 18.a.ii.1 Calculate the total area of the receiving water's catchment (A).
 - 18.a.ii.2 Calculate the total fully developed area of the SMA within the catchment of the receiving SMS (B)
 - 18.a.ii.3 Calculate the pre-development (2007) critical event for the receiving waters' catchment that can be accommodated without flooding at any point in the flow path of the receiving waters and determine the contribution (V) of the SMA ((B) above) to the peak discharge flow due to the critical rainfall event.
 - 18.a.ii.4 Calculate the ratio (D) of the area of the site/development area to the total fully developed SMA within the receiving waters catchment.
 - iii. Ensure that the discharge rate into the SMS from site/development areas does not exceed the solution of this formula: {Maximum discharge rate = $0.8 \times D \times V / (\text{critical storm duration})$ }

Advice note: *This condition allows improvements to reticulated network and consequent reduction in pond sizing.*

- b. For devices discharging to all other areas the consent holder shall:
 - i. Ensure that surface water discharges from the devices do not increase pre-development (2007) peak flow discharge rates in the receiving waterway downstream of the point of discharge for all events up to and including a two (2) percent AEP event.
- c. Details of calculations pursuant to Conditions (18)(a) and (18)(b) shall be:
 - i. Certified by a Chartered Professional Engineer with experience in stormwater and hydrology; and
 - ii. Provided to the Manager on request
- d. The discharge from detention basins shall not:
 - i. Exacerbate flooding of downstream properties in all durations and events up to and including the 24 hour two (2) percent AEP event; and
 - ii. Cause erosion or scour at the point of discharge, or exacerbate erosion or scour of any receiving waterway downstream of the point of discharge in all durations and events up to and including the 24 hour two (2) percent AEP event.

- 19 There shall be no discharge into:
- a. A water race, as defined in Section 5 of the Local Government Act 2002; or
 - b. A wetland, unless the wetland is part of a lawfully established stormwater or wastewater treatment system or part of the SMS.
- 20 The discharge shall not result in a reduction in clarity in the receiving water of greater than 20 percent at the point of discharge from the SMS.

Maintenance

- 21 Within six (6) months of the commencement of this consent, the consent holder shall prepare a routine SMS maintenance programme for the discharges authorised by this consent including those on private properties and:
- a. A copy of the HDC SMS maintenance program shall be supplied to the Manager.
 - b. Any updates to the routine maintenance programme shall be provided to the Manager prior to the changes being implemented.
 - c. The maintenance program shall include action to be undertaken to achieve the environmental outcomes of Conditions (4) to (12) inclusive, above.
- 22 All stormwater management systems within the SMA discharging into the SMS, including those located on private property, shall be maintained in accordance with the HDC stormwater maintenance programme. In addition the following maintenance shall be undertaken:
- a. Treatment swales, attenuation basins, infiltration basins, and detention basins shall be:
 - i. Maintained so that vegetation and/or grass is in a healthy and uniform state, with the exception of seasonal browning off in the summer or autumn;
 - ii. Replanted where erosion or die-off has resulted in bare or patchy soil cover; and
 - iii. Where grassed, mown to ensure grass is at a length between 40 and 150 millimetres.
 - b. Wetlands and wet ponds shall be inspected at least once every three months and maintained so that:
 - i. Hydrocarbons, accumulated sediment, and litter or debris in the stormwater management device, which may adversely affect the performance of the device, or the receiving environment, are removed within 10 working days of any inspection;

- ii. Any blockage within a structural component, which may adversely affect structural stability or the receiving environment, is removed within 10 working days of any inspection;
 - iii. Any scouring or erosion likely to result in failure of the components is repaired within 20 working days of any inspection;
 - iv. Any spalling or corrosion of components, or malfunctioning of the non-return valve likely to result in the failure or malfunction of the component shall be repaired within 20 working days of any inspection;
 - v. Vegetation is in a healthy and uniform state, and removal of weed vegetation and replanting where vegetation has died is carried out; and
 - vi. Accumulated sediment in the fore-bay of the wet ponds, and fore-bay and pool areas of the wetland shall be removed when accumulated to half of the depth of the normal pond level when originally constructed.
- c. Hydrodynamic separators shall be inspected at least once annually, and:
- i. Cleaned at least annually or when filled to a depth of at least 200 millimetres with sediment and/or floating hydrocarbons, whichever is the most frequent;
 - ii. Cleaned out following any spills; and
 - iii. Maintained in accordance with the manufacturers' instructions.
- d. Oil interceptors shall be:
- i. Cleaned at least annually;
 - ii. Cleaned out following any spills; and
 - iii. Maintained in accordance with the manufacturers' instructions.

23 Maintenance works undertaken pursuant to Condition (22) is subject to the consent holder obtaining the approval of the landowner for access. The consent holder shall use its statutory powers and best endeavours to obtain the approval from the landowner to allow maintenance.

Disposal of material

24 Any material removed, including sediment, hydrocarbons and other contaminants, in the exercising of this consent shall be disposed of at a facility authorised to receive such material.

Monitoring and performance standards

25 Soil samples shall be taken from representative infiltration basins, detention basins and attenuation swales:

- a. At least once every five years;
- b. From a depth of between zero and 50 millimetres below the ground surface at the point of lowest elevation; and
- c. By a person who has at least a tertiary science or engineering qualification that required the equivalent of at least one year of full-time study and has at least two years environmental investigation professional work experience post-qualification.

26 Soil samples shall be analysed for the following contaminants:

Copper
Zinc
Benzo(a)pyrene
TPH C7-C9
TPH C10-C14
TPH C15-C36

These samples shall be analysed in milligrams per kilogram (mg/kg) using the United States Environmental Protection Agency method 1312, Synthetic Precipitation Leaching Procedure (SPLP), using reagent water, by a laboratory accredited by Telarc for the appropriate methods, compared against the Leachate Trigger Concentrations, as listed in Condition (27).

27 The results of analyses undertaken in accordance with Condition (26) shall be compared against the following trigger concentrations:

Contaminant	Leachate	Trigger Concentration (milligrams per kg)
Copper		401
Zinc		302
Benzo(a)pyrene		0.0141
TPH C7-C9		3603
TPH C10-C14		73
TPH C15-C36		143

28 If any of the trigger concentrations listed in Condition (27) are exceeded, the soils shall be considered to be contaminated and:

- i. Additional sampling to determine the lateral and vertical extent of contamination, with respect only to the contaminant(s) that exceeded a trigger concentration, shall be carried out;
- ii. Additional sampling of at least two other devices shall be carried out in accordance with Conditions (25) to (27) inclusive, with respect only to the contaminant(s) that exceeded a trigger concentration;

- iii. All contaminated soils identified in accordance with Condition (27) shall be removed or remediated to an acceptable level; and
- iv. The affected infiltration basin(s) and/or retention basin(s) and/or attenuation swale(s) shall be reconstructed.

- 29 The consent holder shall prepare a monitoring programme to investigate the effects of stormwater discharges on surface water quality, stream sediment quality, and the ecology of surface waterways within the SMA. The monitoring programme shall:
- i. Be sufficient to detect any trends in surface water quality, stream sediment quality, and the ecology of surface waterways; and
 - ii. Be sufficient to measure compliance with the objectives for the SMP in the Stormwater Management Area as set out in Map CRC082988A, which forms part of this consent.
- 30 The monitoring programme shall be submitted to the Manager for certification that it complies with Conditions (25) to (29) inclusive of this consent within six (6) months of the commencement of this consent.
- 31 The consent holder may propose amendments to the monitoring programme at any time. Any amendments to the monitoring programme may not replace the certified version until the amended programme has been certified by the Manager as complying with the requirements of Conditions (30) to (34) inclusive.
- 32 The monitoring programme is subject to the consent holder obtaining the approval of the landowner for access. The consent holder shall use its statutory powers and best endeavours to obtain the approval of the landowner to conduct the sampling required by Condition (25) and shall provide documentation of such to the Manager on request.
- 33 Monitoring shall commence, in accordance with the certified monitoring programme, within twelve (12) months of the commencement of this consent.

Administration

- 34 The Canterbury Regional Council may serve notice of its intention to review this consent on any of the last five days of April or October each year. The conditions of this consent may be reviewed for the purposes of:
- a. dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; or
 - b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or

- c. requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the consent; or
- d. complying with the requirements of a relevant rule in an operative regional plan.

35 The lapsing date for the purposes of section 125 of the Resource management Act 1991 shall be 31 December 2017.

Issued at Christchurch on 19 November 2014

Canterbury Regional Council

Consent No: CRC082988

Exercising of resource consent

It is important that you notify Environment Canterbury when you first start using your consent.

GRANTED TO: Hurunui District Council
A DISCHARGE PERMIT: To discharge stormwater.
LOCATION: Amberley Township, AMBERLEY

Even if the consent is replacing a previous consent for the same activity, you need to complete and return this page.

Providing this information will:

- Validate your consent through to its expiry date
- Minimise compliance monitoring charges
- Help provide an accurate picture of the state of the environment.

If consent CRC082988 is not used before 31 Dec 2017 this consent will lapse and no longer be valid.

Declaration:

I have started using this resource consent.

Action taken: (e.g. pasture irrigated, discharge from septic tank/boiler/spray booth etc).

Approximate start date (*Note: this may be different to the date the consent was granted*): _____

Signed: _____ **Date:** _____

Full name of person signing (please print): _____

Please return to:

Environmental Protection - Administration
Environment Canterbury
PO Box 345
Christchurch 8140



- LEGEND**
- Stormwater Management Area (SWMA)
 - Rivers, Streams and Drainage
 - Parcel Boundaries
 - Railway

Map Projection: New Zealand Map Grid
 Horizontal Datum: New Zealand 1949
 Grid GD 1949 New Zealand Map Grid

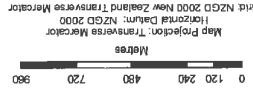


District Council:

Amberley Stormwater Management Area Catchment Layout Survey Requirements

Job Number: 17-ZB550
 Revision: A
 Date: 09 Nov 2012

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- LEGEND**
- Culverts
 - Rivers, Streams and Drainage
 - Parcel Boundaries

