Limits

The discharge shall be only stormwater generated from:

(a) Roofs, roads, hardstand areas, and pervious areas; and

(b) Exposed areas during construction (optional);

associated with the proposed [residential / rural-residential] subdivision of [legal description], located at [address], labelled as "Applicant's Site" on Plan CRC[ ]A and shown on Plan CRC[ ]B, which form part of this consent.

The discharge shall include stormwater generated during the construction phase of the subdivision.

The discharge of roof stormwater shall not arise from galvanised building materials.

The discharges shall not arise from a site where any of the activities or industries listed in Schedule WQL3 or WQL3A of Chapter 4 of the Proposed Natural Resources Regional Plan, which form part of this consent, are conducted or operated.

Stormwater System

Stormwater shall be discharged into land, at map reference NZMS 260 [ ], via the following stormwater system:

(a) Stormwater from roofs shall be discharged via a sealed system that excludes all other stormwater;

(b) Stormwater from roofs shall be collected in roof/storage, etc tanks;

(c) Stormwater from hardstand areas shall be discharged via…;

(d) Stormwater from the [right-of-way/roads/etc] shall be discharged via….

(e) etc…

as shown on Plan CRC[ ]B, which forms part of this consent.

When the capacity of the stormwater system [or components of the stormwater system] is exceeded, stormwater shall be [discharged/conveyed/directed/etc…].

Design

All sumps shall be fitted with submerged or trapped outlets capable of trapping [ ] litres of hydrocarbons.

The [inlet(s)] shall be located as far as possible from the [outlet or overflow structure] of the [component(s)].

The inlet(s) to the [component] shall be designed and constructed with appropriate protection to prevent erosion and scour.

The [component] shall be designed and constructed to collect, treat and dispose of stormwater from all storm events up to and including all 1 in [ ] year storm events of [ ]-hour duration.

The stormwater system, including [list of components] shall be designed and constructed to retain and infiltrate stormwater from storm events up to and including all [ ] percent Annual Exceedance Probability (AEP) events.

A splitter box shall be installed to divert all stormwater generated in excess of the first [15/20/25] millimetres from any storm event into [component].

The stormwater system, including [list of components], shall be designed and constructed to collect, treat, and dispose of the first [15/20/25] millimetres of stormwater generated from any storm event.

Stormwater shall not pond in the [component] for longer than [ ] hours/days after the cessation of any storm event.

The [rapid soakage chamber / soak pit / soakage chamber] shall:

(a) Have a minimum surface area of [ ] square metres;

(b) Have a minimum infiltration rate of [ ] litres per second;

(c) Have a base that extends at least [ ] millimetres into free draining gravels;

(d) Have at least one metre separation distance between the base and the highest seasonal groundwater level at the site; and

(e) Be constructed in accordance with Plan CRC[ ]C which forms part of this consent.

The [component] shall have an infiltration rate:

(a) Not exceeding 112 millimetres per hour and not less than 18 millimetres per hour as determined using a double ring infiltrometer test; or

(b) Not exceeding 75 millimetres per hour and not less than 12 millimetres per hour as determined using a flooded basin test.

The [component] shall:

(a) Have a minimum capacity of [ ] cubic metres;

(b) Be lined with a layer of [topsoil, sandy loam, etc] at least [100 / 150 / 200] millimetres thick;

(c) Be designed and constructed to prevent the entry of surface stormwater runoff from adjacent hardstand and pervious areas;

(d) Have side batters that do not exceed one vertical to [three/four] horizontal;

(e) Have an invert not less than [##.#] metres Relative Level;

(f) Have the poorly drained subsoils to a depth of at least [500] millimetres below the invert excavated and replaced with uncontaminated free draining material;

(g) Have at least one metre separation distance between the base and the highest seasonal groundwater level at the site; and

(h) Be uniformly vegetated with grass of at least [150] millimetres in height;

(i) etc.

as shown on Plan CRC[ ]C which forms part of this consent.

The swale shall:

(a) Be at least [30] metres in length;

(b) Have a hydraulic residence time of at least [9/15/20/etc] minutes;

(c) Be trapezoidal in cross-section;

(d) Have a longitudinal slope no flatter than [1:100 / 1%]; (flat slopes may require an underdrain system);

(e) Have a maximum bottom width of between 0.5 and two metres;

(f) etc.

as shown on Plan CRC[ ]C which forms part of this consent.

All existing natural flow paths as shown on Plan CRC[ ] and all constructed secondary flow paths shall be kept free from all obstructions, including, but not limited to, buildings and solid fences.

All existing natural flow paths and constructed secondary flowpaths shall be designed and constructed to contain flows of up to a one percent Annual Exceedance Probability (1% AEP) storm event in accordance with NZS 4404: Land development and subdivision engineering standard (2004) or any superseding document.

Design Plans and Certification

At least one month prior to the construction of the stormwater system the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, design plans of the stormwater system to be installed.

Within [ ] working days of the installation of the stormwater system, a certificate signed by a Chartered Professional Engineer (CPEng) with stormwater system construction experience shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, to certify that the stormwater system complies with Conditions ( ) to ( ) of this consent. This CPEng shall also sign a statement confirming that they are competent to certify the engineering work

Inspections and Maintenance

(a) The [list of components] shall be inspected at least once every [three/six/twelve] month(s).

(b) Any visible hydrocarbons, and debris or litter shall be removed within [five/ten] working days of the inspection.

(c) Any accumulated sediment in the [infiltration components] shall be removed within [five/ten] working days of the inspection.

(d) Any accumulated sediment in the sumps and [component] shall be removed when the sediment occupies more than one quarter of the depth below the invert of the outlet pipe.

(e) Any scour or erosion shall be repaired within [five/ten] working days of the inspection.

The [component] shall be:

(a) Maintained so that [vegetation or grass] is in a healthy and uniform state.

(b) Replanted where erosion or die-off has resulted in bare or patchy soil cover.

(c) Mowed regularly or maintained so that [vegetation or grass] is at a minimum length of [150] millimetres. Mown [vegetation or grass] shall be removed from the [component].

Disposal of Material

Any material removed in accordance with Conditions ( ) to ( ) shall be disposed of at a facility authorised to receive such material.

Monitoring

Representative soil samples shall be taken from [list of locations in the infiltration components]:

(a) At least once every [five/ten/fifteen] years;

(b) From a depth of between zero and 50 millimetres below the ground surface at the point of lowest elevation;

(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; and

(d) In general accordance with Ministry for the Environment (2004) 'Contaminated Land Management Guidelines - Site Investigation and Analysis of Soils'.

Soil samples shall be analysed by a laboratory accredited for that method by International Accreditation New Zealand or an equivalent accreditation body:

(a) For the following contaminants:

List of contaminants as required

(b) In milligrams per litre (mg/L) 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 ( ).

The analyses undertaken in accordance with Condition ( ) shall be carried out with detection limits of a maximum of 10 percent of the trigger levels set out in Condition ( ), with the exception of Total Petroleum Hydrocarbons detection limits, which shall be as follows:

	Method detection limit
Total Petroleum Hydrocarbons	SPLP (mg/l)
C_7-C_9	0.10
C_{10}-C_{14}	0.20
C_{15}-C_{36}	0.40

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

Leachate Trigger Concentration
(milligrams per litre)

List of contaminants and trigger concentrations as required and sources.

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

(a) 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 in accordance with Conditions ( ) to ( );

(b) All contaminated soils identified in accordance with Condition ( ) shall be removed; and

(c) The [component(s)] shall be reconstructed in accordance with Conditions ( ) to ( ).

Any soils imported on site to backfill any excavation as a result of Condition ( ) shall not be sourced from:

(a) A site where activities included in Schedule WQL3 or WQL3A of the Proposed Natural Resources Regional Plan or the Ministry for the Environment's Hazardous Industries and Activities list have been, or are being, undertaken; or

(b) Any site on the Listed Land Use Register, unless the soil has been analysed for the appropriate contaminants and has been shown to be not contaminated, defined as at or below background concentrations and residential use guideline values.

Recording and Reporting:

By the [ ] each year the consent holder shall provide the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, with a monitoring report for the preceding [3/6/12] month period. This report shall include:

(a) All monitoring results required by the conditions of this consent;

(b) An analysis of all monitoring results against relevant guidelines and the determination of any trends in the results;

(c) Comments on any adverse effects from the discharge and the actions taken to remedy or mitigate these effects;

(d) Recommended changes to the monitoring programme (if applicable).

Records of the inspection and maintenance of the stormwater system shall be kept. The records shall include, but not be limited to information that demonstrates compliance with Conditions ( ) to ( ) of this consent. Copies of these records shall be provided to the Canterbury Regional Council on request.

The results of the analyses undertaken in accordance with Conditions ( ) and ( ) shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within ten workings days of receipt of the results by the consent holder.

Spills

The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminant within the site.

(a) In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable, inspect and clean the stormwater system and take measures to prevent a recurrance;

(b) The consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within 24 hours of a spill event and shall provide the following information:

(i) The date, time, location and estimated volume of the spill;

(ii) The cause of the spill;

(iii) The type of contaminant(s) spilled;

(iv) Clean up procedures undertaken;

(v) Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

(vi) An assessment of any potential effects of the spill; and

(vii) Measures to be undertaken to prevent a recurrance.

Administration

The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be [e.g. 31 December 2014].

The Canterbury Regional Council may, on any of the last five days of [April or October] each year, serve notice of its intention to review the conditions of this consent 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; or

(e) Reviewing the trigger values established for parameters specified in conditions of this consent.