

CONTROLS FOR THE BUILT ENVIRONMENT



EXECUTIVE SUMMARY

A covenant is registered against all titles in the Izone Industrial Park which requires any purchaser/ developer of land to obtain clearances for construction of buildings, site works and the construction of fencing. Approval is required from Izone's Development Manager as obtaining a building consent from the Selwyn District Council is not deemed to cover the covenant issues.

In addition, there are various Selwyn District Council rules that cover building issues. The discharge of stormwater is governed by several global resource consents issued by Environment Canterbury. All these documents should be studied and their requirements incorporated into any building/site work design for any allotment within the Industrial Park.

A summary of the main points required for building proposals is as follows.

Building/Buildings

- Size
- Position on site
- Staging if any
- Elevations
- Materials
- Colour schemes
- Height/recession planes

Fencing

- Fencing proposals and positions
- All front fences must be set back 3m from the legal road boundary

Landscaping

- Planting proposals, especially in the 3m landscaping strip. This is the 3m set back from the legal road boundary
- Rain gardens may be permitted to be constructed within the 3m landscaping set back area but swales are to be excluded from this area

Stormwater Disposal

Stage	Requirement	Land Use	System options
1	Pre-treatment	For the parts of the site where there will be heavy vehicles and handling of materials	Oil/sediment trap(s)
2	Stormwater Treatment	All hardstand areas (not roofs)	Either Soakage swale/ infiltration basin, Raingarden, or Swale (or combination)
3	Discharge to ground	All surfaces, after any treatment required (note: roofs straight to ground)	Soakage pit or soakage chamber

It should be noted that the Environment Canterbury resource consents require a certificate signed by a suitably qualified person to be prepared confirming that the installed system has been designed in accordance with the relevant consent requirements.

Carparking/Access

- Areas to be used for parking
- Areas to be used for access
- Finish surface for all yards/access

The above information is necessary so that a sign off can be obtained. It may be that not all information is available at the early stage of the design, and if this is the case then it may be necessary to seek two approvals; one at a concept stage, and the second at a more developed design stage.



I Z O N E

SOUTHERN BUSINESS HUB

Izone controls

The following is a summary of the Selwyn 'District Plan' rules relevant to the Izone Industrial Park and should be used as a guide only. Please note that these rules are current as of 01 February 2012. As the rules of the District Plan are subject to occasional change we do not recommend reliance on this document but rather that a full analysis of the District Plan be undertaken, including due consideration of any proposed or operative plan changes that may be of relevance.

Unless identified otherwise all activities that meet all the relevant standards of the District Plan are a permitted activity in terms of that Plan.

The Izone Industrial Park is subject to a specific zoning within the District Plan, that being the Business '2A' Zone. This specific zoning provides for business activities requiring large footprint buildings and/or sites and is subject to controls which recognise the unique characteristics of the Izone Industrial Park. The Business 2A Zone is subject to a specific Outline Development Plan (identified in Appendix 22 of the Selwyn District Plan), a copy of which is attached at Appendix 1.

There are a series of activities that are specifically controlled and thus require resource consent if they are to be established. These are listed in points 1, 2 and 3 as follows:

1. NON-COMPLYING ACTIVITIES

The following activities are non-complying activities in the Business 2A Zone:

- (a) Any activity which is specified in Rules 14 to 23 of the District Plan as being a non-complying activity.
- (b) Any of the activities listed below, irrespective of whether they comply with the conditions for permitted activities or discretionary activities in Rules 14 to 23 of the District Plan.
 - Mining or quarrying;
 - Correction facility;
 - Treatment or disposal of solid or liquid waste delivered or conveyed onto the site.

2. DISCRETIONARY ACTIVITIES

The following activities are discretionary activities in the Business 2A Zone:

- (a) Any activity which is specified in Rules 14 to 23 of the District Plan as being a discretionary activity.
- (b) Any of the activities listed below, irrespective of whether they comply with the conditions for permitted activities in Rules 14 to 23 of the District Plan.
 - Any activity that requires an offensive trade licence issued under the Health Act 1956;
 - Audible bird-scaring devices;
 - Forestry;
 - Mineral exploration;
 - Composting or disposal on to land of any organic matter (this rule does not apply to the application of compost or organic fertilisers to fertilise gardens or land);
 - Visitor accommodation;
 - Hospitality activities;
 - Tannery, fellmongering or hide curing, wool scouring or washing;
 - Scrap yards – including automotive dismantling or wrecking yard or scrap metal yard.

3. CONTROLLED ACTIVITIES

The following activities are controlled activities in the Business 2A Zone:

- (a) Any activity which is specified in Rules 14 to 23 of the District Plan as being a controlled activity.
- (b) Any of the activities listed below, irrespective of whether they comply with the conditions for permitted activities in Rules 14 to 23 of the District Plan.
 - Meat processing;
 - Cement manufacture;
 - Hot mix, asphalt paving manufacture;
 - Glass or fibreglass manufacture;
 - Foundry processes, electroplating works, melting of metal, steel manufacture and galvanising;
 - Natural gas, oil or petroleum distillation or refining;
 - Manufacture of hardboard, chipboard or particle board;
 - Timber treatment;
 - Thermal power generation;
 - Any other industry using the combustion of coal, wood or any other bio-mass for space heating or as a source of energy.

Matters over which the Council has reserved control:

- (a) The conditions that apply to all permitted activities in Rules 14 to 23 of the District Plan.
- (b) Any potential nuisance effects arising from dust, odour, smoke and noise.

The main standards to be aware of are the following (note there are many other controls that are of a standard nature for an industrial zone). If any of the following standards are not complied with resource consent is required.

4. NOISE

Any activity conducted on any day, except any residential activity, shall not exceed any of the following noise limits within the time-frames stated:

Business 2A Zone

- (a) Applying at any point within the boundary of any site in the Rural Zone, excluding road, waterway and railway reserves:
 - 7.30am – 8.00pm 60dBA L10
 - 8.00pm – 7.30am 40dBA L10
 - 7.30am – 8.00pm 80dBA Lmax
 - 8.00pm – 7.30am 65dBA Lmax

5. LIGHT SPILL

(a) Any lighting shall not exceed:

- 10 lux spill on to any part of any adjoining property within the same Business Zone.
- 3 lux spill (horizontal or vertical) on to any part of any adjoining property in the Rural Zone which has a common boundary with the Business 2A Zone.

(b) Any lighting in the Business 2A Zone shall be designed so that:

- all outdoor lighting shall be shielded from above in such a manner that the light source is not visible from the outside of the Business 2A Zone;
- all fixed outdoor lighting shall be directed away from adjacent roads outside of the Business 2A Zone.

6. LANDSCAPING

Any principal building in the Business 2A Zone shall be a permitted activity if the following standards are met:

(a) A landscaping strip of at least 3 metres width shall be planted along every road frontage, except along the frontage of Railway Road. The landscaping shall meet the following standards:

- The landscaping shall consist of only those species listed in Appendix 21 of the District Plan. Planting for each allotment shall include:
 - a minimum of two trees from Group A for every 10 metres of road frontage. For boulevard roads the species selected shall match any Group A species in the adjacent road;
 - at least 35% of the required area shall be planted in species from Group C;
 - at least 10% of the required area shall be planted in species from Group D;
 - Group B and C species shall be used when screening tall blank walls and vehicle courts.
- All plants shall be of the following maximum spacings:
 - Group B - 1.5 metre centres;
 - Group C - 1.5 metre centres;
 - Group D - 700mm centres.
- The landscaping planted shall be maintained and if dead, diseased or damaged, shall be removed and replaced.
- No fences or structures shall be erected within the 3 metre landscaping strip. Footpaths of up to 1.5m in width and generally at right angles to the road frontage may be provided in the landscape strip.
- All new planting areas shall be mulched.

Note: For ease of reference, Appendix 21 of the District Plan has been reproduced at Appendix 2 to this document.

7. VEHICLE ACCESS AND VEHICLE CROSSINGS

- (a) Each site shall have legal access to a formed, legal road.
- (b) Access shall not be provided for directly onto Railway Road from the Business 2A Zone.
- (c) Each vehicle crossing shall be designed and sited to comply with the relevant requirements in Appendix 13 of the District Plan.

8. BUILDING – HEIGHT AND REFLECTIVITY

- (a) Any building or structure shall have a height of not more than:
 - Buildings 15 metres
 - Structures 25 metres (note – no definition of structure provided in the District Plan)
- (b) Any building which is greater than 15m in height but does not exceed 20m in height will require resource consent as a restricted discretionary activity, provided that the exterior building materials on all parts of the building above 15m in height do not exceed a reflectivity value of 40%.

Note: Any resource consent application for a building that complies with the conditions prescribed in (b) above and is setback at least 150m from Railway Road or Hoskyns Road shall not be notified and shall not require the written approval of affected parties.

9. BUILDING RECESSION PLANES AND SETBACKS

Any building shall comply with the relevant recession plane requirements set out in Appendix 11 of the District Plan:

- (a) Recession Plane A – applies along the common boundary of the Business 2A Zone and the Rural Zone.
- (b) Recession Plane B – applies along any internal boundary not adjoining any Living Zone or Rural Zone.
- (c) Recession Plane B – applies to the road boundary of Railway Road where it directly adjoins the Business 2A Zone.

Note: Recession Plane B shall not apply to the internal boundaries of the Business 2A Zone.

Any building shall comply with the minimum setback distances from site boundaries as set out below:

Business 2A Zone

- Road boundaries: 10 metres
- Internal boundaries adjoining a rural zoned property: 10 metres, except that this requirement shall be 15 metres in the locations identified on the Outline Development Plan at Appendix 22 of the District Plan (also reproduced as Appendix 1 to this document).

10. DEVELOPMENT WITHIN THE BUSINESS 2A ZONE AT ROLLESTON

- (a) Any outdoor storage of materials within 5m of the centreline of the existing primary shelterbelt along Railway Road shall be a controlled activity.
- (b) The creation of impermeable surfaces within 5m of the centreline of the existing primary shelterbelt along Railway Road shall be a restricted discretionary activity.

11. RETAILING WITHIN THE BUSINESS 2A ZONE AT ROLLESTON

Any retail activity undertaken from an allotment in the Business 2A Zone shall only occupy up to 20% of the Gross Floor Area of building on that allotment or 2,000m², whichever is the lesser.

12. STORMWATER CONSENT REQUIREMENTS

1. Introduction

A set of global stormwater consents have been granted by Environment Canterbury for the Izone Industrial Park. Three different consents cover the discharge from private lots in different areas of the park, and a plan showing which consent covers which area is shown in Appendix 3. Other consents cover the discharge from the public road network.

These consents are similar but have slightly different conditions and as such, there is no requirement for any lot owner to obtain a consent to discharge stormwater provided that they can meet the conditions of the relevant consent. The approach set out within the relevant consent is to provide flexibility in the type of system that needs to be provided while still achieving the water quality and flood protection standards established within the consent conditions. The consents are included in Appendix 4.

This information provides an overview of those conditions, however it is up to each lot owner(s) to familiarise and take any advice necessary to ensure that they understand and conform to the requirements of the relevant consent.

2. The Consented Stormwater System

Discharge location

In all cases the discharge of stormwater is to the ground (ie soakage systems).

System Type

The conditions of the consents are written to provide a range of options for the developer/engineering consultant to consider which best meets the needs of the site. The extent of treatment required differs between type and land use within the site, and will require up to three stages of management as set out in the table below.

Stage	Requirement	Land Use	System options
1	Pre-treatment	For the parts of the site where there will be heavy vehicles and handling of materials	Oil/sediment trap(s)
2	Stormwater Treatment	All hardstand areas (not roofs)	Either Soakage swale/ infiltration basin, Raingarden, or Swale (or combination)
3	Discharge to ground	All surfaces, after any treatment required (note: roofs straight to ground)	Soakage pit or soakage chamber

Design Standard

The consents set out the design standards that are to be used in the design, sizing and detailing of each of these elements as well as establishing the maximum catchment size and other key elements. Reference is made to specific design manuals for each element.

Background information

The consent applications can be sourced from the Environment Canterbury website. These include sample calculations, sample design drawings and associated information.

3. Explanation of Terminology

Term	Explanation
Swale	Shallow grass channel
Soakage Swale/Infiltration Basin	Grassed dry pond lined with engineered medium and designed in accordance with Christchurch City Council's waterways, wetlands and drainage guide (February 2003)
Oil/Sediment Trap	The consent application generally refers to a Humesceptor, which is marketed by Humes Industries, although equivalent products may be used.
Raingardens	Landscape area designed in accordance with Auckland Regional Council's TP10 "Stormwater Treatment Devices" July 2003

4. Management of Hazardous Materials

The consents state that the storage and use of hazardous substances shall not occur anywhere outside a building. The definition of hazardous substances is included in the Proposed Natural Resources Regional Plan, and is as follows:

Hazardous substance means a substance which, when present in concentrations in water, sediment or air

(a) has one or more of the following intrinsic properties:

- (i) explosiveness;
- (ii) flammability;
- (iii) a capacity to oxidise;
- (iv) corrosiveness;
- (v) toxicity (including chronic toxicity);
- (vi) ecotoxicity, with or without bioaccumulation; or
- (vii) which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one or more of the properties specified in clauses (i) to (vi) of this definition; and

(b) exceeds the minimum degree of hazard specified in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

(Source: p 4-334 Definitions of Terms: Chapter 4 Natural Resources Regional Plan, June 2011, Environment Canterbury)

The consent documentation also sets out the required actions in case of a spill of a hazardous substance.

5. Maintenance

The consents set out the maintenance requirements and require inspections to be made every six months and records to be kept of those inspections and maintenance activities.

6. On-going Monitoring

The consents require that the soil from any soakage swale, swale or raingarden are tested every five years, and rehabilitated if the level of any of the contaminants exceeds stated thresholds.

7. Certification

The consents require that a certificate be signed by a suitably qualified person confirming that the installed system has been designed in accordance with the relevant consent and submitted to Environment Canterbury. This shall also be submitted to Izone.

APPENDIX 2: PLANTING REQUIREMENTS FOR IZONE

Group A: Higher canopy trees with an ultimate height of 6.0 to 10.0 metres.

Scientific Name	Common Name
Cordyline australis	Cabbage Tree/Ti kouka
Hoheria angustifolia	Narrow Leaved Lacebark/Houhere
Hoheria sextylosa	Long Leaved Lacebark/Houhere
Liriodendron tulipifera*	Tulip Tree*
Plagianthus regius	Ribbonwood/Manatu
Platanus orientalis*	Oriental Plane*
Podocarpus totara	Totara
Quercus robur*	English Oak*
Tilia x europaea*	Common Lime*

*Note: These species only to be used in public areas

Group B: Medium canopy trees with an ultimate height of 4.0 to 6.0 metres.

Scientific Name	Common Name
Dodonaea viscosa	Akeake
Kunzea ericoides	Kanuka
Pittosporum eugenioides	Lemonwood/Tarata
Pittosporum tenuifolium	Kohuhu
Pseudopanax arboreus	Fivefingers/Puakao
Pseudopanax crassifolium	Lancewood/Horoeka
Pseudopanax ferox	Fierce Lancewood
Sophora microphylla	Kowhai

Group C: Shrub canopy of 1.0m to 4.0m in height

Scientific Name

Carmichaelia australis
Cassinia leptophylla
Coprosma crassifolia
Coprosma lucida
Coprosma propinqua
Coprosma robusta
Coprosma rugosa
Coprosma virescens
Corokia cotoneaster^
Cortaderia richardii
Griselinia littoralis^
Hebe salicifolia
Hebe stricta
Hebe strictissima
Leptospermum scoparium
Lophomyrtus obcordata
Muehlenbeckia astonii
Olearia odorata
Olearia paniculata^
Phormium tenax

Common Name

New Zealand Broom
Tauhinu
Mikimiki
Shining Karamu
Mingimingi
Karamu
Mikimiki
Mikimiki
Korokio^
Toetoe
Broadleaf^
Koromiko
Koromiko
Koromiko
Tea Tree/Manuka
Rohutu
Pohuehue
Scented Shrub Daisy
Golden Akeake^
Flax/Harakeke

^ Note: plant species suitable for hedging

Group D: Ground covers

Scientific Name

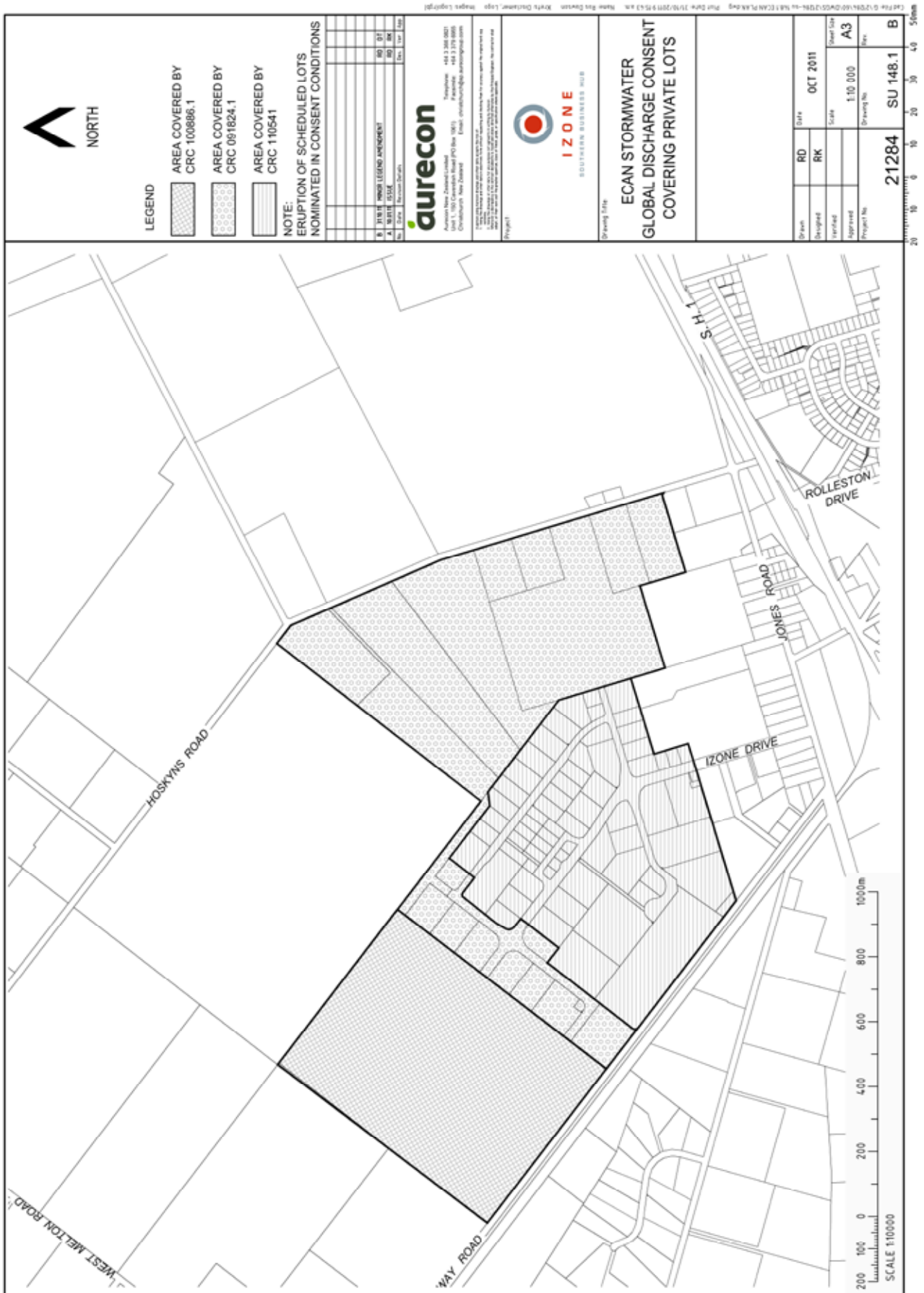
Anemanthele lessoniana
Astelia fragrans
Carex flagellifera
Carex secta
Chionochloa conspicua
Coprosma acerosa
Dianella nigra
Dietes grandiflora*
Juncus gregiflorus
Libertia ixioides
Melicytus alpinus
Phormium cookianum
Poa cita
Trachelospermum jasminoides*

Common Name

Orizopsis/Windgrass
Bush Flax (green form)/Kakaha
Tussock/Sedge
Tussock/Sedge
Tussock/Hunangamoho
Sand Coprosma
Turututu
Wild Iris*
Rush
New Zealand Iris/Mikoikoi
Porcupine Shrub
Wharariki
Silver Tussock
Star Jasmine*

*Note: These species only to be used in public areas

APPENDIX 3: PLAN - ENVIRONMENT CANTERBURY STORMWATER GLOBAL DISCHARGE CONSENT - PRIVATE LOTS



APPENDIX 4: ENVIRONMENT CANTERBURY STORMWATER GLOBAL DISCHARGE CONSENTS - PRIVATE LOTS

Puruant to section 104 of the Resource Management Act 1991
(The Canterbury Regional Council (known as Environment Canterbury))

GRANTS TO: Selwyn District Council

A DISCHARGE PERMIT: To discharge contaminants into land

DATE DECISION: 17 February 2010

EXPIRY DATE: 19 November 2044

LOCATION: Railway Road, Rolleston

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- 1) The discharge shall be only stormwater generated from:
 - (a) Roofs and hardstand areas on individual lots; and
 - (b) Exposed areas during construction of individual lots;
 Within the industrial park located at Railway Road, Rolleston, at map reference NZMS M36: 5850-3650, labelled as "Applicant's site" and shown as the shaded area on Plan CRC100819.1G, which forms part of this consent.
- 2) The discharge of roof stormwater shall not arise from galvanised building materials.
- 3) The discharge 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.

CONSTRUCTION PHASE

- 4) At least 10 working days prior to the commencement of construction, the consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, in writing, of the start date of works.
- 5) The consent holder shall ensure that all personnel working on the site are made aware of, and have access to, the contents of this consent document.
- 6) During construction, the consent holder shall use best practicable option to minimise exposed surfaces and discharges of sediment-laden stormwater.

- 7) (a) The consent holder shall take all practicable measures to avoid spills of fuel or any other hazardous substances within the site during construction.
- (b) In the event of a spill of fuel or any other contaminant on hardstand areas, the consent holder shall clean up the spill as soon as practicable and take measures to prevent a reoccurrence.
- (c) 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 hazardous substance(s) spilled;
 - (iv) Emergency procedure 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 reoccurrence.

STORMWATER SYSTEM

- 8) Stormwater from roofs shall be discharged within the same lot via soakage pits or rapid soakage chambers or any of the options specified in Condition (9).
- 9) Stormwater from hardstand areas within private lots shall be discharged within the site via any of the following primary stormwater systems, except stormwater from loading and unloading areas which shall be only discharged via Option R:
 - (a) Option N – Soakage swale
 - (b) Option O – Hydrodynamic separator
 - (c) Option P – Raingarden
 - (d) Option Q – Swale
 - (e) Option R – Oil and sediment trap
- 10) When the capacity of any primary stormwater system is exceeded, stormwater shall be discharged via the following corresponding secondary system:
 - (a) Option N – Soakage pit or rapid soakage chamber
 - (b) Option O – Soakage swale, soakage basin or raingarden, and then a soakage pit or rapid soakage chamber
 - (c) Option P – Soakage pit or rapid soakage chamber
 - (d) Option Q – Soakage pit, rapid soakage chamber, infiltration trench or soakage basin
 - (e) Option R – Soakage swale or raingarden and then a soakage pit, rapid soakage chamber, infiltration trench or soakage basin.
- 11) Each soakage swale and soakage basin shall be designed and constructed:
 - (a) To contain and treat all stormwater generated from the first 25 millimetres of rain from any rain event;
 - (b) With a infiltration rate through the base of between 20 and 50 millimetres per hour, as measured using the flooded basin test; and
 - (c) In accordance with the Christchurch City Council Waterways, Wetlands, and Drainage Manual, February 2003.
- 12) Each swale shall be designed and constructed:
 - (a) To have a hydraulic residence time of at least nine minutes at a rainfall intensity of at least 10 millimetres per hour;
 - (b) So that all stormwater is treated by a minimum length of 30 metres; and
 - (c) In accordance with the Auckland Regional Council, technical Publications Number 10, May 2003.
- 13) Each raingarden shall be designed and constructed;
 - (a) To contain and treat all stormwater generated from the first 25 millimetres of rain from any rain event; and
 - (b) In accordance with the Auckland Regional Council, technical publications Number 10, May 2003.

- 14) Each hydrodynamic separator shall be designed and constructed:
 - (a) To treat 18 litres per second before bypassing; and
 - (b) Remove at least 75 percent of total suspended solids.
- 15) Each oil and sediment trap shall be designed and constructed:
 - (a) To have a discharge quality of 15 milligrams per litre of hydrocarbons or less;
 - (b) With a shut off valve at the outlet;
 - (c) With a hydrocarbon storage capacity of at least 2500 litres; and
 - (d) In accordance with the Auckland Regional Council, technical publications Number 10, May 2003.
- 16) The primary and secondary stormwater systems, as described in Conditions (9) and (10) , shall have sufficient combined capacity to contain and dispose of all stormwater generated from a two percent Annual Exceedence Probability (2%AEP) rain event of any duration.
- 17) The stormwater systems shall be designed in accordance with Plans CRC100819A,B,C,D,E and F, which form part of this consent.
- 18) At least one month prior to the construction of the stormwater system(s) the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, design plans of the stormwater system(s) to be installed.
- 19) Within ten working days of the installation of the stormwater system(s), a certificate signed by a Certified 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(s) complies with Conditions (8) and (18) of this consent. This CPEng shall also sign a statement confirming that they are competent to certify the engineering work.

INSPECTIONS AND MAINTENANCE

- 20)
 - (a) The stormwater systems shall be inspected at least once every six months.
 - (b) Any visible hydrocarbons and debris or litter shall be removed within five working days of the inspection.
 - (c) Any accumulated sediment in the swales, soakage swales, soakage basin and raingardens shall be removed within five working days of the inspection
 - (d) Any accumulated sediment in sumps 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 in the stormwater system shall be repaired within ten working days of the inspection.
- 21) The swales, soakage swales, soakage basins and raingardens shall be;
 - (a) Maintained so that vegetation and grass is in a healthy and uniform state and does not contain weed vegetation;
 - (b) Replanted where erosion or die-off has resulted in bare or patchy soil cover; and
 - (c) Mowed to ensure grass is at a length between 50 and 150 millimetres.
- 22) The hydrodynamic separators and oil sediment traps shall be;
 - (a) Cleaned at least annually or when filled to a depth of at least 200 millimetres with sediment, whichever is the most frequent;
 - (b) Cleaned out immediately following any spills; and
 - (c) Maintained in accordance with the manufacturers' instructions.

MONITORING

- 23) Representative soil samples shall be taken from each soakage basin, soakage swale, swale and raingarden:
- At least once every five years;
 - From a depth of between zero and 50 millimetres below the ground surface at the point of lowest elevation;
 - By a person who has at least has 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
 - In general accordance with Ministry for the Environment (2004) 'Contaminated Land Management guidelines – Site Investigation and Analysis of Soils'.
- 24) Soil samples shall be analysed:
- For the following contaminants:
 - Copper
 - Zinc
 - Benzo(a)pyrene
 - TPH C₇-C₉
 - TPH C₁₀-C₁₄
 - TPH C₁₅-C₃₆
 - In milligrams per litre (mg/L) using the United States Environmental Protection Agency method 1312, Synthetic Precipitation Leading Procedure (SPLP), using reagent water, by a laboratory accredited by Telarc for the appropriate methods, and compared against the Leachate Trigger Concentrations, as listed in Conditions (26).
- 25) The analysis undertaken in accordance with Conditions (24) shall be carried out with detection limits of a maximum of 10 percent of the trigger levels set out in Condition (26), 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

- 26) The results of analyses undertaken in accordance with Conditions (24) and (25) shall be compared against the following trigger concentrations:

Leachate Trigger Concentration	(Milligrams per litre)
Copper	40 (1)
Zinc	30 (2)
Benzo(a)pyrene	00.14 (1)
TPH C ₇ -C ₉	360 (3)
TPH C ₁₀ -C ₁₄	7 (3)
TPH C ₁₅ -C ₃₆	14 (3)

- 1 – 20xMAV Drinking Water Standards 2008 – health significance
 2 – 20xMAV Drinking Water Standards 2008 – aesthetic
 3- Refer to CRC00961 decision Amalgamated Holdings Ltd

- 27) If any of the trigger concentrations listed in Condition (26) are exceeded, the soils shall be considered and:
- 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 (23) to (26);
 - All contaminated soils identified in accordance with Condition (27)(a) shall be removed; and
 - The soakage basin(s), soakage swale(s), swale(s) and raingarden(s) shall be reconstructed in accordance with Conditions (11) to (13), (16) and (17).

DISPOSAL OF MATERIAL

- 28) Any material removed in accordance with Conditions (20), (22) and (27) shall be disposed of at a facility authorised to receive such material.

RECORDING AND REPORTING

- 29) 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 (20) to (28) of this consent. Copies of these records shall be provided to the Canterbury Regional Council on request.
- 30) The results of the analyses undertaken in accordance with conditions (23) to (27) shall be provided to Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within ten working days of receipt of the results by the consent holder.

ADMINISTRATION

- 31) The lapsing date for the purpose of section 125 of the Resource Management Act 1991 shall be 31 December 2014.
- 32) The Canterbury Regional Council may, once per year, on any of the last five working days of January or July, 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 levels specified for contaminants.

Pursuant to section 104 of the Resource Management Act 1991
(The Canterbury Regional Council (known as Environment Canterbury))

GRANTS TO: Selwyn District Council

A DISCHARGE PERMIT: To discharge contaminants into land

DATE DECISION: 07 April 2009

EXPIRY DATE: 28 June 2041

LOCATION: Hoskyns Road, ROLLESTON

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- 1) The discharge shall be only stormwater generated from:
 - (a) Private lots; and
 - (b) Construction
 Within the proposed 70.75 hectare industrial park located at Izone Industrial Park, Rolleston, at map reference NZMS M36: 5985-3619, labelled as "Applicant's site" and shown as the shaded area on Plan CRC091220.1A, which forms part of this consent.

STORMWATER SYSTEM - CONSTRUCTION

- 2) At least 10 working days prior to the commencement of construction, the consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, in writing, of the start date of works.
- 3) The consent holder shall ensure that all personnel working on the site are made aware of, and have access to, the contents of this consent document.
- 4) During construction, the consent holder shall use best practicable option to minimise exposed surfaces and discharges of sediment-laden stormwater.
- 5) During construction, stormwater shall be discharged into sediment retention ponds that are sized and constructed in accordance with the Environment Canterbury 2007 "Erosion and Sediment Control Guidelines for the Canterbury Region" Report No CRC06/23.
- 6) Stormwater in excess of the capacity of the sediment retention ponds shall be conveyed onto grassed areas within the site.
- 7) No earthworks shall occur until the sediment retention ponds have been constructed. For the purposes of this consent, earthworks means the disturbance of land surfaces by blading, contouring, ripping, moving, removing, placing or replacing soil and earth, or by excavation, or by cutting or filling operations.
- 8) The sediment retention ponds and any erosion and sediment control devices shall be inspected and cleaned weekly during construction, and immediately following construction.
- 9) The consent holder shall ensure that stormwater from no more than 10 hectares of disturbed land is conveyed to any one sediment retention pond.

STORMWATER SYSTEM – PRIVATE LOTS

- 10) Stormwater from roofs within private lots shall be discharged within the site via soakage pits or rapid soakage chambers or any of the options specified in Condition (11).
- 11) Stormwater from hardstand areas within private lots shall be discharged within the site via any of the following primary stormwater systems, except stormwater from loading and unloading areas which must be discharged via Option R:
 - Option N – Soakage swale
 - Option P – Raingarden
 - Option Q – Swale
 - Option R – Oil and sediment trap

When the capacity of any primary stormwater system is exceeded, stormwater shall be discharged via the following corresponding secondary system:

 - Option N – Soakage pit or soakage chamber
 - Option P – Soakage pit or soakage chamber
 - Option Q – Soakage pit, soakage chamber, infiltration trench or soakage basin
 - Option R – The primary and then secondary stormwater systems specified for Options N,P or Q
- 12) The soakage swales and raingardens shall contain and treat the first 25 millimetres of rain from any rain event;
- 13) The swales shall:
 - (a) Have a hydraulic residence time of at least nine minutes at a rainfall intensity of at least 10 millimetres per hour; and
 - (b) A minimum length of 30 metres.
- 14) The primary and secondary stormwater systems shall have sufficient combined capacity to contain and dispose of stormwater from any two percent annual exceedance probability storm.
- 15) The stormwater systems shall be designed in accordance with the listed design manual, have the relevant key elements, and be constructed in accordance with the reference drawings, as detailed in Table CRC091824T, which forms part of this consent.
- 16) At least one month prior to the construction of the stormwater system(s) the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, design plans of the stormwater system(s) to be installed.
- 17) A certificate signed by the person responsible for designing the stormwater system or a suitably qualified person shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, to certify that the stormwater system(s) is constructed and installed in accordance with Conditions (10) to (16) of this consent and design plans.

INSPECTIONS AND MAINTENANCE

- 18) (a) The stormwater systems shall be inspected at least once every six months.
 (b) Any visible hydrocarbons and debris or litter shall be removed within five working days of the inspection.
 (c) Any accumulated sediment in the swales, soakage swales, soakage basin and rain gardens shall be removed within five working days of the inspection
 (d) Any accumulated sediment in sumps 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 in the stormwater system shall be repaired within ten working days of the inspection.
- 19) The swales, soakage swales and rain gardens shall be;
 (a) Maintained so that vegetation and grass is in a healthy and uniform state
 (b) Replanted where erosion or die-off has resulted in bare or patchy soil cover; and
 (c) Mowed to ensure grass is at a length of 50 millimetres.
- 20) The oil/sediment traps shall be cleaned at least annually or when filled to a depth of at least 200 millimetres with sediment.
- 21) The consent holder shall keep records of the inspection and maintenance of the stormwater system. The records shall include but not be limited to information that demonstrates compliance with Conditions (19) to (21) of this consent. Copies of these records shall be provided to the Canterbury Regional Council on request.

MONITORING

- 22) A sample of the sand or soil shall be collected from each soakage swale, swale, and rain garden:
 (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 suitably qualified or experienced person.
- 23) Sand and soil samples shall be analysed:
 (a) For the following contaminants:
 Total Chromium
 Total Nickel
 Total Cadmium
 Total Copper
 Total Zinc
 Benzo(a)pyrene
 Total petroleum hydrocarbons (C₇-C₉)
 Total petroleum hydrocarbons (C₁₀-C₁₄)
 Total petroleum hydrocarbons (C₁₅-C₃₆)
 (b) In milligrams per kilogram dry weight soil;
 (c) By a laboratory accredited for that method of analysis by International Accreditation New Zealand or equivalent authority.

- 24) Should any contaminants analysed in accordance with Condition (24) exceed the trigger levels, in milligrams per kilogram dry weight soil, set out below:
- | | |
|--|-------|
| Total Chromium | 600 |
| Total Nickel | 35 |
| Total Cadmium | 3 |
| Total Copper | 130 |
| Total Zinc | 200 |
| Benzo(a)pyrene | 1.64 |
| Total petroleum hydrocarbons (C ₇ -C ₉) | 1.600 |
| Total petroleum hydrocarbons (C ₁₀ -C ₁₄) | 3.200 |
- (a) Further testing shall be undertaken to determine the extent of the contamination;
- (b) Contaminated soil shall be removed and replaced with uncontaminated soil and the affected area shall be revegetated;
- (c) The consent holder shall undertake an assessment to determine the risk to the environment from the exceedances and provide, within two months of receipt for the sampling results, a report detailing recommended proposed actions, if any, and timeframes for completion of such actions to be undertaken, to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager
- 25) The results of the analyses undertaken in accordance with Conditions (24) and (25) shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within ten working days of receipt of the results by the consent holder.
- 26) Any materials removed in accordance with Conditions (19), (21) and (25) shall be disposed of at a facility authorised to receive such material.

SITE MANAGEMENT

- 27) The storage and use of hazardous substances or activities listed in Schedule 1 (schedule WQL3 of the PNRRP) of this consent shall not be undertaken on private lots within the site unless they take place undercover and in a manner such that stormwater cannot become entrained with any hazardous substances.
- 28) The concentration of total petroleum hydrocarbons shall no exceed 15 milligrams per litre in the discharge from any oil/sediment trap.
- 29) a) The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminants during construction and within private lots.
- (b) In the event of a spill of fuel or any other contaminant the consent holder shall clean up the spill as soon as practicable and take measures to prevent a reoccurrence.
- (c) 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 hazardous substance(s) spilled;
 - (iv) clean up procedure 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 reoccurrence.

ADMINISTRATION

- 30) The lapsing date for the purpose of section 125 shall be 31 March 2014.
- 31) The Canterbury Regional Council may, on any of the last five working 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 levels specified for contaminants.

Pursuant to section 104 of the Resource Management Act 1991
(The Canterbury Regional Council (known as Environment Canterbury))

GRANTS TO: Selwyn District Council

A DISCHARGE PERMIT: To discharge contaminants into land

DATE DECISION: 24 June 2011

EXPIRY DATE: 24 June 2046

LOCATION: Hoskyns Road, ROLLESTON

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- 1) The discharge shall be only stormwater generated from:
 - (a) Private lots; and excluding those listed in Table CRC110541A, which forms part of this consent; and
 - (b) Construction;Within stages two to four of Izone Industrial Park, Rolleston, at map reference NZMS M36: 5926-3577, labelled as "Applicant's site" and shown as the shaded area on Plan CRC110541/CRC110923A, which forms part of this consent.

STORMWATER SYSTEM - CONSTRUCTION

- 2) Not less than 10 working days prior to the commencement of construction, the consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, in writing, of the start date of works.
- 3) The consent holder shall ensure that all personnel working on the site are made aware of, and have access to, the contents of this consent document.
- 4) During construction, the consent holder shall use best practicable option to minimise exposed surfaces and discharges of sediment-laden stormwater.
- 5) During construction, stormwater shall be discharged into sediment retention ponds that are sized and constructed in accordance with the Environment Canterbury 2007 "Erosion and Sediment Control Guidelines for the Canterbury Region" Report No CRC06/23.
- 6) Stormwater in excess of the capacity of the sediment retention ponds shall be conveyed onto grassed areas within the site.
- 7) No earthworks shall occur until the sediment retention ponds have been constructed. For the purposes of this consent, earthworks means the disturbance of land surfaces by blading, contouring, ripping, moving, removing, placing or replacing soil and earth, or by excavation, or by cutting or filling operations.
- 8) The sediment retention ponds and any erosion and sediment control devices shall be inspected and cleaned weekly during construction, and immediately following construction.
- 9) The consent holder shall ensure that stormwater from no more than 10 hectares of disturbed land is conveyed to any one sediment retention pond.

STORMWATER SYSTEM – PRIVATE LOTS

- 10) Stormwater from roofs within private lots shall be discharged within the site via soakage pits or rapid soakage chambers or any of the options specified in Condition (11).
- 11) Stormwater from hardstand areas within private lots shall be discharged within the site via any of the following primary stormwater systems, except stormwater from loading and unloading areas which must be discharged via Option R:
- Option N – Soakage swale
 - Option P – Raingarden
 - Option Q – Swale
 - Option R – Oil and sediment trap
- When the capacity of any primary stormwater system is exceeded, stormwater shall be discharged via the following corresponding secondary system:
- Option N – Soakage pit or soakage chamber
 - Option P – Soakage pit or soakage chamber
 - Option Q – Soakage pit, soakage chamber, infiltration trench or soakage basin basin
 - Option R – The primary and then secondary stormwater systems specified for Options N,P or Q
- 12) The soakage swales and raingardens shall contain and treat the first 25 millimetres of rain from any rain event;
- 13) The swales shall:
- (a) Have a hydraulic residence time of at least nine minutes at a rainfall intensity of at least 10 millimetres per hour; and
 - (b) A minimum length of 30 metres.
- 14) The primary and secondary stormwater systems shall have sufficient combined capacity to contain and dispose of stormwater from any two percent annual exceedance probability storm.
- 15) The stormwater systems shall be designed in accordance with the listed design manual, have the relevant key elements, and be constructed in accordance with the reference drawings, as detailed in Table CRC110541T, which forms part of this consent.
- 16) At least one month prior to the construction of the stormwater system(s) the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, design plans of the stormwater system(s) to be installed.
- 17) A certificate signed by the person responsible for designing the stormwater system or a suitably qualified person shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, to certify that the stormwater system(s) is constructed and installed in accordance with Conditions (10) to (16) of this consent and design plans.

INSPECTIONS AND MAINTENANCE

- 18) (a) The stormwater systems shall be inspected at least once every six months.
 (b) Any visible hydrocarbons and debris or litter shall be removed within five working days of the inspection.
 (c) Any accumulated sediment in the swales, soakage swales, soakage basin and rain gardens shall be removed within five working days of the inspection
 (d) Any accumulated sediment in sumps 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 in the stormwater system shall be repaired within ten working days of the inspection.
- 19) The swales, soakage swales and rain gardens shall be;
 (a) Maintained so that vegetation and grass is in a healthy and uniform state
 (b) Replanted where erosion or die-off has resulted in bare or patchy soil cover; and
 (c) Mowed to ensure grass is at a length of 50 millimetres.
- 20) The oil/sediment traps shall be cleaned at least annually or when filled to a depth of at least 200 millimetres with sediment.
- 21) The consent holder shall keep records of the inspection and maintenance of the stormwater system. The records shall include but not be limited to information that demonstrates compliance with Conditions (18) to (20) of this consent. Copies of these records shall be provided to the Canterbury Regional Council on request.

MONITORING

- 22) Representative soil samples shall be taken from each soakage swale, swale, and rain garden:
 (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; and
 (d) In general accordance with Ministry for the Environment (2004) 'Contaminated Land Management guidelines – Site Investigation and Analysis of Soils'.
- 23) Sand and soil samples shall be analysed:
 (a) For the following contaminants:
 Chromium
 Nickel
 Cadmium
 Copper
 Lead
 Zinc
 Benzo(a)pyrene (equivalent concentration)
 Total petroleum hydrocarbons (C₇-C₉)
 Total petroleum hydrocarbons (C₁₀-C₁₄)
 Total petroleum hydrocarbons (C₁₅-C₃₆)
 (b) In milligrams per litre (mg/L) using the United States Environmental Protection Agency method 1312, Synthetic Precipitation Leading Procedure (SPLP), using reagent water, by a laboratory accredited by Telarc for the appropriate methods, and compared against the Leachate Trigger Concentrations, as listed in Condition (25).

- 24) The analyses undertaken in accordance with Conditions (23) shall be carried out with detection limits of a maximum of 10 percent of the trigger levels set out in Condition (25), with the exception of Total Petroleum Hydrocarbons detection limits, which shall be as follows:

Method detection limit

<u>Total Petroleum Hydrocarbons</u>	<u>SPLP (mg/l)</u>
C ₇ -C ₉	0.10
C ₁₀ -C ₁₄	0.20
C ₁₅ -C ₃₆	0.40

- 25) The results of analyses undertaken in accordance with Conditions (23) shall be;
- (a) compared against the following trigger concentrations:

	<u>Leachate Trigger Concentration</u> <u>(milligrams per litre)</u>
Chromium	1 (1)
Nickel	1.6 (1)
Cadmium	0.08 (1)
Copper	40 (1)
Lead	0.2 (1)
Zinc	30 (2)
Benzo(a)pyrene (equivalent concentration)	0.014 (1)
Total petroleum hydrocarbons (C ₇ -C ₉)	360 (3)
Total petroleum hydrocarbons (C ₁₀ -C ₁₄)	7 (3)
Total petroleum hydrocarbons (C ₁₅ -C ₃₆)	14 (3)

(1) – 20 x MAV (Maximum Acceptable Value) for determined of health significance

(2) – 20 x GV (Guideline Value) for aesthetic determined

(3) – 20 x Adopted guideline value sourced from Ministry for the Environment Oil Industry Guidelines 1999 (Table 5.2)

- (b) Provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager

- 26) If any of the trigger concentrations listed in Condition (25) are exceeded, the soils shall be considered to be contaminated and within 60 working days of the receipt of the results of analyses undertaken in accordance with Condition (23) by the applicant;
- (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 (22) to (25);
- (b) All contaminated soils identified in accordance with Condition (26) shall be removed; and
- (c) The soakage bswale(s), swale(s), swale(s) and /or raingarden(s) shall be reconstructed in accordance with Conditions (11) to (15).
- 27) Any soils imported on site to backfill any excavation as a result of Condition (26) shall not be sourced from;
- (a) A site where activities included in the ministry for the Environment's Hazardous Industries and Activities list have been, or are being, undertaken; or
- (b) Any site on the Canterbury Regional Council's 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 industrial use guideline values.

SITE MANAGEMENT

- 28) The storage and use of hazardous substances or activities listed in Schedule 1 which forms part of this consent shall not be undertaken on private lots within the site unless they take place undercover and in a manner such that stormwater cannot become entrained with any hazardous substances.
- 29) The concentration of total petroleum hydrocarbons shall not exceed 15 milligrams per litre in the discharge from any oil/sediment trap.
- 30) a) The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminants during construction and within private lots.
 (b) In the event of a spill of fuel or any other contaminant the consent holder shall clean up the spill as soon as practicable and take measures to prevent a reoccurrence.
 (c) 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 hazardous substance(s) spilled;
 (iv) clean up procedure 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 reoccurrence.
- 31) Any material removed in accordance with Conditions (8), (19), (26) and (30) shall be disposed of at a facility authorised to receive such material. Written confirmation of disposal shall be kept.

REPORTING

- 32) The results of all soil analyses shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement, within ten working days of receipt of the results by the consent holder.

ADMINISTRATION

- 33) The lapsing date for the purpose of section 125 of the Resource Management Act 1991 shall be 30 June 2016.
- 34) The Canterbury Regional Council may, on any of the last five working 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 levels specified for contaminants.



IZONE

SOUTHERN BUSINESS HUB

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If you are unsure about any of the details contained in this document or would like to discuss any of the points covered within please phone **0800 569 455**



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