

under: the Resource Management Act 1991

in the matter of: an application by Christchurch City Council for a
Comprehensive Stormwater Discharge Consent
(CRC190445).

Legal submissions on behalf of Christchurch International Airport

Dated: 12 November 2018

TABLED AT HEARING

Application:

Date: ...13 Nov.....

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LEGAL SUBMISSIONS ON BEHALF OF CHRISTCHURCH INTERNATIONAL AIRPORT

INTRODUCTION

- 1 These submissions are prepared on behalf of Christchurch International Airport Limited (*CIAL*).
 - 2 There are two issues that are briefly addressed in these submissions:
 - 2.1 the inter-relationship between an existing CCC resource consent (being CRC000315) and the suite of consents that relate to stormwater management at Christchurch International Airport (*the Airport*); and
 - 2.2 the need for the conditions and management plan framework to accommodate consideration of bird strike risk.
 - 3 In both cases the relevant concern appears to have been acknowledged by both the applicant and the section 42A Officer but CIAL does not agree with the applicant's position that the existing wording of conditions adequately deals with the concerns raised.
 - 4 Despite the position on relief, given the context for the concern appears to be agreed between the applicant, the section 42A Officer and CIAL, these submissions take a more 'practical' rather than overly legalistic approach to a discussion of the issues.
 - 5 In short, it is CIAL's view that changes need to be made to the conditions and management plan framework to better reflect what is actually intended.
- Inter-relationship between stormwater consents**
- 6 From a consenting perspective, stormwater management at CIAL is extremely complicated with multiple partially overlapping resource consents authorising different aspects of the same wider activity.
 - 7 A brief summary of the more core consents is set out in the evidence of **Ms Felicity Blackmore**. For immediate purposes it is simply noted that:
 - 7.1 the suite of CIAL-held resource consents (and in particular CIAL resource consent CRC174395) do not authorise the discharge of stormwater from roofs at the Airport, as it

relates to all development that has taken place since mid-2007;¹

7.2 were CCC resource consent CRC000315 surrendered (which appears to be intended in the application) then a potential compliance issue would arise for CIAL for all discharges from all post 2007 development at the Airport;

7.3 of more concern, some 67.42 hectares of future development at CIAL which is authorised under CRC174395 would not be able to occur in the manner intended by the Environment Court - as whilst other discharges would be authorised, the discharge from roofs would not be. I.e. the current consents and authorised development at the Airport would effectively be rendered a nullity.

8 The issue of roofs at Airport (and the split between CRC174395 and CRC000315) is the outcome of what was a very contentious application process in relation to CIAL's resource consent CRC174395 (then CRC042924).

9 In short, the CIAL application had been made in reliance of assurances provided by CCC during the application process that it would continue to enable roof discharges at the Airport under CRC000315. The CIAL application went on appeal to the Environment Court (following an appeal by a submitter) and in turn the Environment Court relied on the same assurances when confirming the grant of consent.

10 The Environment Court was very concerned to ensure that discharges were both all consented but not 'double consented'.

11 Given the contentious previous consent process, CIAL is reluctant to unnecessarily embark on a further consenting process. As it stands, CCC resource consent CRC000315 would form part of the existing environment for the purposes of determining any application but that of course becomes questionable were both the Airport excluded from CRC190445 and the grant of that consent being 'conditional' on the surrender of CRC000315.

12 Prior to this hearing, CIAL has raised its concerns with CCC and although discussions have been constructive, CIAL remains of the view that the conditions are cumbersome and that there is uncertainty around whether the currently proposed conditions for

¹ Noting the release of the Environment Court decision in *National Investment Trust v Canterbury Regional Council* (Unreported, 11 May 2007, C053/07, Environment Court, Christchurch), Smith J, that confirmed the grant of resource consent CRC042924 (now CRC174395).

CRC190445 actually cover CIAL roof discharges for its authorised but as yet unbuilt developments.

- 13 To understand CIAL's position is perhaps useful to provide comment alongside the relevant conditions:

Table 1: CIAL comments on conditions

CCC conditions (5 November version)		CIAL comment
1	This consent permits the discharge onto or into land or into surface water of stormwater which:	-
	<p>a. <i>is generated from existing sites, greenfield development sites and re-development sites within the territorial boundaries of the Christchurch City Council, and is discharged into the Christchurch City Council stormwater network, but excludes those areas outside of Banks Peninsula settlement areas; or</i></p>	<p>Two issues arise with this condition:</p> <ul style="list-style-type: none"> Given that the Airport comprises of multiple certificates of title (some of which have been developed and some which have not), the definition of "existing site" is problematic (noting CIAL is not a greenfield development site or re-development site): <p>existing site means any site that discharges its stormwater into the CCC stormwater network at the date of commencement of this resource consent.</p> <p>site means an allotment title or other legally defined parcel of land held in a single certificate of title and any balance land or adjacent land with title(s) held by the same owner or ownership with an affiliated interest. In the case of greenfield and re-development, site means the area of land defined by the boundaries of proposed land disturbance.</p> <p>It appears that discharges at the Airport are not discharged "into the Christchurch City Council stormwater network" – rather they are discharged into infrastructure/soakage areas that are owned and operated by CIAL.</p>
	<p>b. <i>enters the Christchurch City Council stormwater network from outside of the City boundary; or</i></p>	Not applicable to CIAL.
	<p>c. <i>is generated from roofs of individual existing sites, greenfield development sites and re-developments sites and is</i></p>	Condition 1(c) includes reference to "individual existing sites" (as opposed to just "existing sites" in

CCC conditions (5 November version)		CIAL comment
	discharged onto or into land within the site; or	1(a)). Whether any difference is intended by the different words is not clear. Regardless, the same issues as to "site" arise as for condition 1(a).
	d. is generated from hard-standing areas of individual existing residential sites, <u>residential and non-residential</u> greenfield development and <u>residential and non-residential</u> re-development sites and is discharged onto or into land within the site. <u>Advice Note: For the avoidance of doubt, this consent does not authorise existing discharges into land from non-residential hardstand areas via private stormwater systems.</u>	CIAL is not a residential activity (or a non-residential greenfield development or re-development site). The advice note appears to be potentially problematic for CIAL (and potentially contrary to the wider condition?). The Airport is effectively a stormwater system.
	Exclusions	
2	There shall be no discharge to land or surface water from the following unless expressly authorised by Canterbury Regional Council and Christchurch City Council:	
	a. Any <u>new activity or re-development in a site or development area on the Canterbury Regional Council's Listed Land Use Register that is considered by Christchurch City Council to pose an unacceptably high risk of surface water or groundwater contamination</u> ;	The comments in the CCC condition table suggest that CCC's view is that this amended condition addresses CIAL's concern. Although unclear it appears that CCC may be focusing on pre-existing development (2007- today's date) and it has ignored already consented but yet to be built development. I.e. conceivably further development at the Airport could be a "new activity" although given that condition (2) is an exclusion to condition (1), if the Airport is not already covered by (1) then presumably the exclusions will not apply. The existing consents and comprehensive condition suites applying to discharges at the Airport ensure effects are appropriately mitigated.
	b. Any stage of during the construction of a development site with a total area of disturbance exceeding 5 hectares on flat land or 1 hectare on hill land; and	Future development at CIAL will exceed 5 hectares in area. There are currently 67.42 hectares authorised under condition 1(a)(ii) of CRC174395 that are yet to be built.

CCC conditions (5 November version)		CIAL comment
	<p>c. Any site listed on the attached Schedule 1 'Sites excluded from the Christchurch City Council Comprehensive Stormwater Network Discharge Consent' <u>(i) at commencement of this consent; or (ii) as a result of the process set out in condition 3 below, or (iii) as a result of the process set out in condition 41, or (iv) by variation of this consent.</u></p>	<p>Schedule 1 (a list of certificate of title references) is not particularly user friendly but CIAL has not been advised it is included within the references set out.</p>
3.	<p>Discharge <u>into the Christchurch City Council stormwater network</u> from the sites excluded by Condition 2 <u>are will-be-within-the-scope-of</u> authorised under this consent on 1 January 2025, or when current discharge permits expire <u>or are surrendered</u> for those sites, whichever is the latest, <u>unless through the transitional arrangements set out below, or through the audits described in condition 41, the consent holder determines that the site poses an unacceptably high risk of surface water or groundwater contamination.</u></p> <p><u>The transitional arrangements are:</u></p> <p>...</p>	<p>As noted earlier in these submissions, it is unclear on when CCC will surrender its existing consent.</p>

14 Again, the conditions are complicated (and also inherently have an additional level of uncertainty with, for example, unusually both the consent holder and the Regional Council being enabled through a subsequent approvals process to determine when the consent will and will not apply).

15 Overall, it is CIAL's view that:

15.1 condition 1(c) probably covers development that has taken place to date but is not broad enough to cover all the sites that CIAL wishes to undertake future development on (which are authorised in all other respects other than roofs under CRC174395); and

15.2 regardless, CIAL may fall into the exclusions provided condition 2.

16 Given the unique consenting history, CIAL's view is that the 'easiest' fix without writing the wider condition suite is to include what would now be a new condition 1(e):

e. is a discharge from roofs on land owned by Christchurch International Airport Limited within the areas of development authorised by condition 1(a)(ii) of CRC174395

- 17 Alternatively, CIAL opposes the surrender of CRC000315 until the issue is sorted out (whether that be as a part of this hearing process or another process alongside it). Obviously the surrender of a resource consent (section 138) cannot occur as of right – with the consent authority needing to consider issues such as compliance and the potential for adverse effects on the environment. The potential adverse effects of having a ‘hole’ in the consenting regime at the Airport (contrary to the position put to the Environment Court) would be highly relevant.

BIRD STRIKE

- 18 This (and the relief sought) is discussed by **Ms Blackmore**.
- 19 In short, there is increasing recognition (at both an international and national level) of the need for an environmental/regulatory response to managing bird strike risk. Much of CIAL’s time is now spent in Resource Management Act processes such as this one seeking provisions in relation to the appropriate management of bird strike risk.
- 20 In the Christchurch City context this includes an Objective, an ‘avoidance policy’ and rules that manage the risk of birdstrike within a “*Birdstrike Management Area*” (within 3 km of the thresholds of the runways of the Airport):

3.3.12 Objective – Infrastructure

...

- b. Strategic infrastructure, including its role and function, is protected from incompatible development and activities by avoiding adverse effects from them, including reverse sensitivity effects. This includes:

...

- iv. managing the risk of birdstrike to aircraft using Christchurch International Airport; and

6.7.2.1.2 Policy – Avoidance or mitigation of navigational or operational impediments

- a. Avoid or mitigate the potential effects of activities that could interfere with the safe navigation and control of aircraft, including activities that could interfere with visibility or increase the possibility of birdstrike.

21 It also includes a specific policy relating to storm water disposal:

8.2.3.4 Policy - Stormwater disposal

b. Outside the Central City:

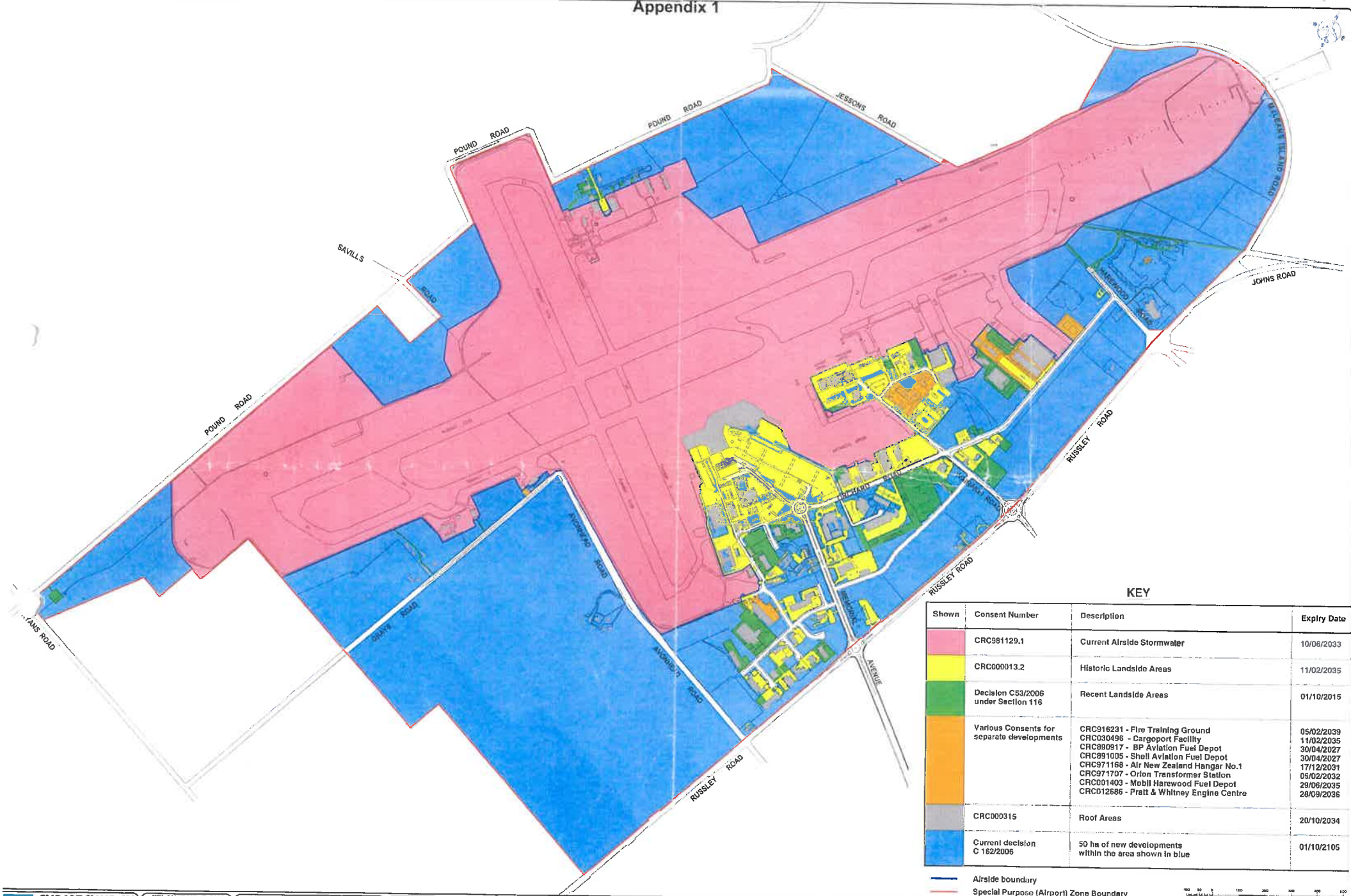
- vi. Ensure that stormwater management measures do not increase the potential for birdstrike to aircraft in proximity to the airport

22 Although these obviously derive from the District Plan, it is CIAL's view that they are both relevant to determining the application and reflective of appropriate planning practice.

23 The actual relief sought (based on evidence presented as a part of the District Plan review process) is set out by **Ms Blackmore**.

Dated: 12 November 2018

Ben Williams
Counsel for Christchurch
International Airport Limited



KEY

Shown	Consent Number	Description	Expiry Date
	CRC981129.1	Current Airside Stormwater	10/06/2033
	CRC000013.2	Historic Landside Areas	11/02/2035
	Decision C53/2006 under Section 116	Recent Landside Areas	01/10/2015
	Various Consents for separate developments	CRC916231 - Fire Training Ground CRC030496 - Cargoport Facility CRC890917 - BP Aviation Fuel Depot CRC891005 - Shell Aviation Fuel Depot CRC871158 - Air New Zealand Hangar No.1 CRC871707 - Orion Transformer Station CRC001403 - Mobil Harewood Fuel Depot CRC012686 - Pratt & Whitney Engine Centre	05/02/2039 11/02/2035 30/04/2027 30/04/2027 17/12/2031 05/02/2032 23/06/2035 28/03/2036
	CRC000315	Roof Areas	20/10/2034
	Current decision C 162/2006	50 ha of new developments within the area shown in blue	01/10/2105

Airside boundary
 Special Purpose (Airport) Zone Boundary

0 50 100 150 200 250 300 400 500
 SCALE IN METRES

RESOURCE CONSENT CRC174395

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO:	Christchurch International Airport Limited
A DISCHARGE PERMIT (S15):	To discharge stormwater to land.
COMMENCEMENT DATE:	20 Jun 2017
EXPIRY DATE:	11 Feb 2035
LOCATION:	Christchurch International Airport, Christchurch

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- 1 The discharge shall be only:
 - a. Stormwater from compacted hardstand areas, excluding roofs, on land owned by Christchurch International Airport Limited (CIAL) comprising the following:
 - i. Existing discharges described as "Existing: established 1 Oct 2005 – 11 May 2007" (orange areas), "Existing: established 11 May 2007 – 1 May 2014" (green areas) as shown in Plan CRC174395A which is attached to and forms part of this resource consent; and
 - ii. Discharges from an additional maximum of 100 hectares of compacted hardstand area, within the area, including hardstanding areas covered by roofs above the extent of development as at 1 May 2014, labelled as "Undeveloped at 1 May 2014", and shown in blue and purple on Plan CRC174395A.
 - b. Stormwater generated from exposed areas during construction as identified Condition 1.a.ii.

ADVICE NOTE: The discharge of stormwater associated with any new development of land that occurs in the area identified as 'Undeveloped – at 1 May 2014' in Plan CRC174395 and that is undertaken by a Tenant, not the consent holder, will not be deducted from the 100 hectares authorised in Condition 1.a.ii.

- 2 No subsurface soakage disposal systems shall be installed within 50 metres of any drinking water supply well, excluding those owned by the consent holder.
- 3 Should the location of the airside boundary fence of the Airport be changed, the consent holder shall, within seven working days, provide to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance an updated plan CRC174395A.

DEFINITIONS

4 For the purposes of this entire consent, the following definitions shall apply:

- a. Catchment: The total area that drains into any one discharge point.
- b. Compacted areas and hardstand refer to man-made surfaces in developed areas such as compacted gravel, concrete, chipseal or asphalt, used for the purposes described under Catchment Activity Categories.
- c. Freight: Any material, substance or object that is transported in bulk by truck, train, ship or aircraft.
- d. Freight Handling: Any activity involving intensive or regularly repeated movement, loading, uploading, processing, packaging, stacking, or otherwise dealing with freight for the purposes of facilitating its storage or transport, but excluding the carriage of freight by road vehicle during the course of normal transport to or from a destination.
- e. Hazardous Substance: Any substance that falls within the definition of Hazardous Substance in section 2 of the RMA.
- f. Hazardous substance handling: the transfer of hazardous substances, whether in liquid or solid form, from one receptacle to another including emptying, decanting, pouring, mixing and refuelling filling.
- g. Roads and parking areas: Any landside catchment with the main function of enabling motor vehicles to pass through, manoeuvre or remain stationary therein.
- h. Stormwater is rain-sourced or routine wash down sourced runoff (not using cleaning agents), which may contain contaminants (including traces of hazardous substances) that are entrained as the runoff or wash down water flows over hard surfaces. It excludes the discharge to ground of runoff from spilled or deliberately released hazardous substances and wash down of such spillage or releases.
- i. Stormwater Design: 90% of all rainfall events, which equates to a design rainfall intensity of six millimetres per hour.
- j. Surrounding soil and grass: Any area with a topsoil depth of approximately 100 millimetres, and with a healthy uniform grass cover, onto which stormwater from an adjacent hardstand surface will naturally flow, without being concentrated or directed via a kerb and/or channelling system, and from which stormwater will seep into the ground without passing through a further stormwater disposal system such as a soak pit, except:
 - i. Where stormwater is concentrated or directed via a kerb and/or channelling system to any area of soil and grass for concentrated disposal, that concentrated disposal area shall have a topsoil depth of no less than 250 millimetres, a healthy uniform grass cover maintained between 50 and 150 millimetres and a maximum infiltration rate of no more than 112 millimetres per hour as determined using a double ring infiltrometer test (or 75 millimetres per hour as determined using a flooded basin test) from which stormwater will seep into the ground without passing through further stormwater disposal system such as a soak pit.

CONSTRUCTION PHASE DISCHARGES

- 5 The discharge of stormwater during construction phase activities on any site within CIAL owned land shall occur in accordance with an Erosion and Sediment Control Plan (ESCP) as developed in accordance with Condition 6. for each site.
- 6 The ESCP shall be prepared in accordance with Environment Canterbury's "Erosion and Sediment Control Guidelines for the Canterbury Region" Report No. CRC R06/23, February 2007 (ESCG).
- 7 The ESCP shall include, but not be limited to:
- a. A map showing the location of all works;
 - b. Detailed plans showing the location of sediment control measures, on-site catchment boundaries, and sources of runoff;
 - c. Drawings and specifications of designated sediment control measures;
 - d. A programme of works, which includes but is not limited to, a proposed timeframe for the works; and
 - e. Inspection and maintenance of the sediment control measures; and
 - f. Vehicle refuelling procedures.
- 8 The ESCP shall be submitted to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, at least ten working days prior to construction on any site within the CIAL owned land, for certification that it complies with Environment Canterbury's ESCG, and the conditions of this consent.
- 9 Notwithstanding Condition 8. if the consent holder has not received the certification within 10 working days of the Regional Leader Monitoring and Compliance receiving the ESCP, the discharge may commence.
- 10 The ESCP may be amended at any time. Any amendments shall be:
- a. Only for the purpose of improving the efficacy of the erosion and sediment control measures and shall not result in reduced discharge quality; and
 - b. Consistent with the conditions of this resource consent; and
 - c. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, prior to any amendment being implemented.

STORMWATER DESIGN

- 11 *Cancelled*
- 12 All oil-water separators shall be designed to achieve a concentration of total petroleum hydrocarbons in any discharge not exceeding 15 grams per cubic metre as determined by ASTM_D_3921 or USEPA 418.1 or APHA 5520-F method or equivalent, at any time over a storm event, or such higher standard as is necessary to ensure compliance with other conditions of this consent.
- 13 The concentration of total petroleum hydrocarbons in any discharge to a ground soakage area shall not exceed 15 grams per cubic metre as a mean concentration over a storm event, as measured in or immediately prior to the soak pit, nor cause concentrations to exceed five grams per cubic metre at any adjacent monitoring bore.

- 14 Stormwater discharges from land described in Condition 1.a.ii. shall be from a site undertaking an activity described in the Catchment Activity Categories, provided the stormwater system meets the minimum stormwater treatment and disposal system requirements for each catchment, or an alternative treatment system that provides an equivalent or better level of treatment, and provided those storm water disposal systems continue to be maintained to a level where they continue to provide the level of treatment and/or containment specified.

CATCHMENT ACTIVITY CATEGORIES

- 15 Location and minimum stormwater treatment and disposal system requirements

Catchment Activity Category	Minimum stormwater treatment and disposal system requirements
a. Roads, parking and general manoeuvring and storage areas other than as set out in b-d inclusive below in this table.	<p>The area shall be designed such that the stormwater shall be discharged by means of either</p> <ul style="list-style-type: none"> i. The surrounding topsoil and grass; or ii. A sump with a submerged or trapped outlet capable of trapping at least 30 litres of hydrocarbons and fitted with a filter insert designed to remove suspended sediment greater than 150 micrometres in diameter for at least 90% of all rainfall events. From this sump, the stormwater shall be discharged to ground via a soak pit; iii. A sump with a submerged or trapped outlet capable of trapping at least 30 litres of hydrocarbons and piped to a propriety filter device that treats at least 90% of all rainfall events and removes at least 75 percent of total suspended sediment from the total annual load. From this the stormwater shall be discharged to ground via a soak pit. iv. A shutoff valve shall be located prior to the soak pit if hazardous substances are delivered within this catchment in large containers (200 Litres or greater). <p>Advice Note: It is intended that option 15(a)(ii) is only used where the catchment area for a single soak pit is less than 1.5 Hectares.</p>
b. Any catchment in which any of the following activities occur to a significant extent or level:	<p>The areas shall be designed such that the stormwater shall be discharged by means of either:</p> <ul style="list-style-type: none"> i. The surrounding topsoil and grass; ii. A sump with a submerged or trapped outlet capable of trapping at least 30 litres of hydrocarbons piped

<p>The handling and/or storage of freight; or</p> <p>The cleaning, storage, maintenance and/or preparation of vehicles (not using cleaning agents). or</p> <p>Any other general outdoor cleaning activities (not using cleaning agents) capable of producing more than negligible levels of contaminants.</p>	<p>to a shutoff valve and then piped to a multimedia filter device that treats at least 90% of all rainfall events and removes at least 75 percent of total suspended sediment from the total annual load. From this multi-media filter the stormwater shall be discharged to ground via a soak pit.</p> <p>iii. Via the side channel, to a rain garden that captures and treats at least 25 millimetres of any rainfall event and removes at least 75 percent of total suspended solids. From this rain garden, the stormwater shall be discharged to ground either directly from the base of the rain garden or via a soak pit.</p> <p>iv. A shutoff valve shall be located prior to the soak pit if hazardous substances are delivered within this catchment in large containers (200 Litres or greater).</p>
<p>c. Storage and handling of hydrocarbons</p>	<p>i. Up to and including 50 Litres may be stored and handled (including the physical transfer) within a stormwater catchment that meets the treatment and disposal requirements of Category 15(a) or 15(b).</p> <p>ii. Greater than 50 Litres and up to and including 2,100L may be stored and handled within a stormwater catchment that is designed to provide spill containment of at least 120% of the maximum storage volume. A shut off valve may be used to achieve the spill containment within a stormwater catchment.</p> <p>iii. Greater than 2,100 Litres shall be stored and handled within a stormwater catchment that drains to an oil water separator designed to contain a volume of at least 2,500 Litres.</p>
<p>d. Storage and handling of hazardous substances (greater than 50 litres per catchment), other than hydrocarbons.</p>	<p>i. Storage and handling of these materials must occur beneath roofed areas and on hardstanding areas that are excluded from any stormwater discharge catchment.</p>

16 Where any activity may fall into more than one of categories 15.a. to 15.d. above, the category with the higher level of treatment shall be required.

17 For stormwater discharges from any activities not explicitly described in the list above, prior to the commencement of the discharge the consent holder must provide information to the

Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, that will demonstrate that the contaminant load from that site is similar to or less than the contaminant load from a particular catchment category described in the preceding conditions and that the type of treatment that is applied to the stormwater from the site is equivalent to, or better than, the type of treatment prescribed for that catchment category.

- 18 Soak pits shall be designed in general accordance with the Christchurch City Council Wetlands, Waterways and Drainage Guide (CCC WWDG) – chapter 6.5 or the New Zealand Building Code Clause E1 Surface Water and the Christchurch International Airport Ltd Stormwater Design Guide

CERTIFICATION

- 19 Design plans for each treatment, reticulation and disposal system shall be submitted to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance at least ten working days prior to works commencing. The treatment and disposal system shall enable compliance with the conditions of this consent.
- 20 Within three months of the installation of the stormwater system a certificate shall be provided to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, to certify that the stormwater system complies with conditions of this consent. The certificate shall be signed by a Chartered Professional Engineer (CPEng) with stormwater system construction experience.

OPERATIONS, INSPECTIONS AND MAINTENANCE

- 21 Sumps, stormwater treatment devices and soak pits shall be inspected visually at least once every six months and following any spill of hazardous substance on the site;
- a. If the inspection indicates that a spillage has occurred, the actions described in Conditions 22. to 25. inclusive shall be carried out;
 - b. If the inspection carried out shows any hydrocarbon accumulation greater than three millimetre thick in an oil-water interceptor or sump, the hydrocarbons shall be removed;
 - c. All debris and sediment in an oil-water interceptor or sump shall be removed once the depth of sediment exceeds 200 millimetres.
 - d. The consent holder shall keep written records of all inspections and maintenance.
- 22 Oil and other spills shall be dealt with in accordance with the Airport Emergency Response Procedures submitted with the application. The response plan shall be submitted to the Canterbury Regional Council on request.
- 23 In the event of a spill of contaminants, all practicable measures shall be taken to isolate the contributing catchment from discharging to groundwater, and all practicable measures shall be taken to minimise the amount of contaminants discharged to land.
- 24 If any spill of fuel or other hazardous substances enters a subsurface stormwater system, the consent holder shall within 24 hours notify the Canterbury Regional Council's 24 hour Pollution Hotline and shall prepare and provide to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, a report detailing:
- a. The date, time and duration of any spill of fuel or other contaminants, including an assessment of the cause of the discharge,

- b. The emergency procedures undertaken to clean up the spill, any potential effects of the spill, and
- c. An appropriate monitoring and remediation strategy to address those potential effects.

This information shall be provided as soon as possible but at least within five working days after the spill occurs, or otherwise on request of the Canterbury Regional Council. In addition, following such an event, the consent holder shall take samples at the soak pits and/or at monitoring bores as requested by Canterbury Regional Council Officers and shall provide the results of that sampling to the Canterbury Regional Council.

- 25 In the event of firefighting foam or other oil dispersants being used, all practicable measures shall be taken to isolate the contributing catchment from any stormwater system that discharges to a soak pit. The content of the sumps and oil/water separators potentially containing firefighting foam or oil dispersants shall be removed as soon as is practicable .
- 26 The consent holder shall at all times have in place an Environmental Management System which includes, at a minimum, an Environmental Compliance and Monitoring Programme as described in the application. The consent holder's staff, tenants and lease holders shall be required by the consent holder to implement and adhere to that Programme. The consent holder shall also provide training opportunities for site staff on airport environmental management procedures and shall require relevant site staff, including employees of its tenants, to undertake such training at least once every two years. The consent holder shall also ensure that an independent consultant carries out a regular audit of the Environmental Compliance and Monitoring Programme and environmental practices on the site, including on parts of the site leased to third parties.
- 27 The consent holder shall prepare and provide to the Canterbury Regional Council, on request, records of the management and performance of the overall stormwater system at each individual site for the catchment types described in Condition 15. The records shall include:
 - a. A copy of the Environmental Compliance and Monitoring Programme for the site;
 - b. Records of all inspections and maintenance of the stormwater treatment disposal system including oil-water interceptors, sumps and soak pits; and
 - c. The type and amount of any firefighting foam or hydrocarbon dispersants used on the site.

SAMPLING

- 28 *Cancelled*
- 29 The consent holder shall install monitoring bores immediately down gradient of and within 10 metres (or the closest distance that can practically be achieved) of any soak pits that are located to the east of the main runway 2002 and receives stormwater from the following stormwater catchment categories:
 - a. Condition 15.c. if regular vehicle refuelling takes place.
- 30 The monitoring boreholes shall be:
 - a. Constructed of PVC with a minimum internal diameter of 50 millimetres: and

- i. Have a single screen that spans the range of water table levels, with samples collected from within 0.1 metres of the water table using low-flow sampling techniques; or
 - ii. Be multiple wells at each location, each with a screen no more than three metres long, spanning the range of water table levels. At each sampling event, the sample shall be collected from the well where the water table is within the screened interval.
 - b. Designed in consultation with the Canterbury Regional Council's Groundwater Quality Scientist;
 - c. Designed to allow access by Canterbury Regional Council for groundwater sampling.
- 31 Samples shall be taken as close as practicable to the water table at quarterly intervals for the first 12 months after the installation of the monitoring bore(s) and thereafter at least once annually within five days after the start of a runoff event following a dry period of a week or more, and shall also be taken following any spill of a hazardous substance which reaches a soak pit. The samples shall be analysed for:
- a. Total petroleum hydrocarbons (grams per cubic metre);
 - b. Volatile organic compounds (US-EPA method 8260 or equivalent); and
 - c. Dissolved Copper, Lead, Zinc and any other hazardous substances known to have been spilled or released within the catchment area within the previous six months.

ADVICE NOTE: that a rainfall event of 1.5 millimetres or less is still considered to be a dry day as it is not large enough to generate runoff that would enter the soak pit.

- 32 All sampling required under this consent shall be undertaken by a competent person using the most appropriate scientifically recognised and accredited methods.
- 33 The laboratory carrying out analysis for the purpose of Condition 31, shall be accredited to ISO/IEC Guide 25: (1990) or equivalent defined by an accreditation body recognised as operating to ISO/IEC Guide 58.
- 34 Provision shall be made to allow the discharge from sites described in Condition 1(a)(ii) to be sampled by the Canterbury Regional Council at the soak pit. The consent holder shall maintain all fixtures and monitoring aids and access to any sampling points to ensure that sampling can be undertaken.

CONTAMINATED LAND

- 35 Prior to the discharge of stormwater to land from any new development on land shown as hatched in Plan CRC174395, the Consent Holder shall undertake a Detailed Site Investigation in accordance with the Ministry for the Environment (2004) *Contaminated Land Management Guidelines-Site Investigation and Analysis of Soils* to confirm the classification of the land in accordance with the *Site Management Plan; Excavation and Handling of Contaminated Soils at Christchurch International Airport*, prepared for Christchurch International Airport Ltd, by Tonkin and Taylor, dated 2016, or any revisions to this plan.

- 36 All soil sampling and the review of soil sampling results shall be completed by a Suitably Qualified and Experienced Contaminated Land Specialist.
- 37 Stormwater shall not be discharged into land where a Detailed Site Investigation identifies soil contamination that exceeds the background concentrations in soils as determined by the Suitably Qualified and Experienced Contaminated Land Specialist in consultation with Environment Canterbury, Team Leader Contaminated Sites, unless:
- The site of the proposed soak pit is remediated and a validation investigation demonstrates contaminant concentrations are below background contaminant concentrations; or
 - Representative soil sampling as determined in consultation with Environment Canterbury, Team Leader Contaminated Sites, is undertaken of the natural soil at the location of the soak pit and in accordance with Condition 38. The results must show contaminant concentrations do not exceed the limits in Condition 39.

ADVICE NOTE: Samples do not need to be taken at the base of the soak pit. Samples at the soak pit locations can be collected from the surface where there are natural soils or any other depth that the Suitably Qualified and Experienced Contaminated Land Specialist considers to be suitable. If surface or shallow samples meet the consent limits then samples collected at a depth will also meet these limits. More than one sample will likely be required for large soak pits.

- 38 Soil samples taken from the natural soils at the base of the soak pit shall be analysed for the relevant contaminants in 38.a and 38.b. as directed by the Suitably Qualified and Experienced Contaminated Land Specialist. The analysis shall be completed by a laboratory accredited for that method by International Accreditation New Zealand or an equivalent accreditation body:
- The following contaminants shall be sampled in milligrams per litre (mg/L) using the United States Environmental Protection Agency method 1312, Synthetic Precipitation Leaching Procedure (SPLP), using reagent water:
 - Arsenic;
 - Cadmium
 - Chromium
 - Copper
 - Lead
 - Nickel
 - Zinc; and
 - The following contaminants shall be sampled in milligrams per kilogram (mg/kg) using total matrix method:
 - Benzo(a)pyrene;
 - Naphthalene; and
 - Pyrene.

- 39 The analyses undertaken in accordance with Condition 38 shall be carried out with detection limits of a maximum of 10 percent of the limits below. Stormwater shall not be discharged into a soak pit where soils samples exceed the following limits:

Contaminant	Leachate Trigger Concentration (milligrams per litre)
Arsenic	0.2
Cadmium	0.08
Chromium	1.0
Total Copper ¹	40
Total Lead ¹	0.2
Nickel	1.6
Total Zinc ²	30

Contaminant	Contaminant concentration (milligrams per kilogram)
Napthalene ³	16
Pyrene ³	>10,000
Benzo(a)pyrene _{3,4}	>10,000

- (1) 20 x MAV (Maximum Acceptable Value) for determinand of health significance
- (2) 20 x GV (Guideline Value) for aesthetic determinand
- (3) Guideline value from MfE Oil Industry Guidelines 1999 (Table 4.20)
- (4) Benzo[a]pyrene refers to Benzo[a]pyrene only (not Benzo[a]pyrene equivalent concentration).

REPORTING

- 40 Before 31 August each year, the consent holder shall submit an "Annual Environmental Monitoring Report" to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, covering the preceding 12 month period and ending on 30 June. The report shall provide details of:
- a. Records of all monitoring inspections carried out;
 - b. The results of the sediment sampling detailed in Condition 28.;
 - c. The results of the groundwater sampling detailed in Condition 31.;
 - d. Detailed descriptions of all sampling methods;
 - e. A register of all hazardous substance storage and handling areas;
 - f. A schedule of independent audits undertaken to check for environmental compliance, including conditions of this consent for tenanted sites;
 - g. A record of staff training to achieve improved environmental compliance in accordance with Condition 26.;

- h. A record of all spill events, identifying the cause of each spill and the environmental effects arising from it ;
- i. An action plan, with timelines, to address issues arising from any deficiencies identified by the audits, staff training or spill incident reports;
- j. A detailed breakdown and calculation of the new hardstand, compacted or building areas installed during the year and a total of new hardstand area installed since the commencement of the consent; and
- k. A summary of all investigations completed in accordance with Conditions 35 to 39.

ADMINISTRATION

- 41 The Canterbury Regional Council may, once a year on any of the last five working days of any April and October, serve notice of its intention to review the conditions of this consent for the purposes of:
- a. Determining whether the conditions of this consent are adequate to deal with any adverse effects on the environment, which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - b. Altering the frequency and type of monitoring required under this consent; or
 - c. Requiring the adoption of the best practicable option to remove or reduce any adverse effects on the environment and/or to minimise the risk of such effects occurring

Issued at Christchurch on 20 June 2017

Canterbury Regional Council

