

# Selwyn District Council

## DPR Supplier Panel

### Earthworks (DW011)



Topic Name: District Wide

Scope Title: Earthworks

Policy/Rule Options Report

16 February 2018



## Planz Consultants

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## **APPENDICES:**

- Appendix 1:** Selwyn District Plan: Relevant Issues, Objectives and Policies
- Appendix 2:** Selwyn District Plan: Relevant Rules
- Appendix 3:** Building Act 2004: Relevant Provisions
- Appendix 4:** Canterbury Regional Policy Statement: Relevant Provisions
- Appendix 5:** Canterbury Land and Water Regional Plan: Relevant Provisions
- Appendix 6:** Canterbury Air Regional Plan: Relevant Provisions
- Appendix 7:** Ashburton District Plan: Relevant Provisions
- Appendix 8:** Waimakariri District Plan: Relevant Provisions
- Appendix 9:** Hurunui District Plan: Relevant Provisions
- Appendix 10:** Christchurch District Plan: Relevant Provisions
- Appendix 11:** Selwyn District Council Record of Earthworks-Related Consent Applications Since 2006
- Appendix 12:** Selwyn District Council SWOT Analysis

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# Earthworks – Planning Component (DW011)

## Policy/Rule Options Report

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### 1 Report Overview

Planz Consultants Ltd has been engaged by Selwyn District Council (SDC) to review the ‘general’ provisions for earthworks in the Operative Selwyn District Plan (‘Operative Plan’), investigate areas of regulatory overlap with Regional Plans and the Building Act 2004, and identify what changes may be appropriate to the rule package for earthworks in the Proposed Selwyn District Plan (‘Proposed Plan’).

The Project Scope of Work sets out that this review relates specifically to earthworks activities, including the cut and deposition of material and stockpiling, but specifically excludes the following matters:

- Mining, mineral exploration and quarrying;
- Noise;
- Earthworks within sensitive locations; and
- Loss of versatile soils.

This report has been split into three parts. Part One provides background on the existing planning framework in the Selwyn District under which earthworks activities are controlled and identifies any relevant matters contained in the various applicable planning documents. Part Two contains a description of all of the potential adverse effects that can arise from earthworks activities and then evaluates the effectiveness of the operative provisions in addressing the identified effects. In doing so, Part Two identifies a series of issues with the existing provisions that should be addressed going forward. Finally, Part Three provides recommendations in relation to the drafting of policies and rules for general earthworks in the Proposed Selwyn District Plan, based on the issues identified in Parts One and Two of the report.

## PART ONE

## 2 Part One Introduction

The purpose of Part One is to provide background on the existing planning framework in the Selwyn District under which earthworks activities are controlled. The following sections provide a summary of the relevant earthworks provisions in each of the following documents:

- Building Act 2004
- Canterbury Regional Policy Statement (CRPS)
- Canterbury Land and Water Plan (CLWP)
- Canterbury Air Regional Plan (CARP)
- Relevant National Environmental Standards (NES)
- Relevant National Policy Statements (NPS)
- The Ashburton, Waimakariri, Hurunui and Christchurch District Plans

Furthermore, similarities between the above documents and the Operative Plan are identified, as well as any matters contained within the planning documents that are considered important to the review of earthworks provisions in the Selwyn District Plan.

As a point of reference, the issues, objectives and policies from the Operative Plan that are considered relevant to this report (namely, those relating to earthworks) are displayed in a table attached as **Appendix 1** to this report. Similarly, the relevant rules from the Operative Plan have been tabulated in **Appendix 2**. It should be noted that the attached tables are not exhaustive and provisions, in many cases, have been summarised.

## 3 Building Act 2004

The provisions contained in the Building Act 2004 (as well as the Building Code which is referred to within the Act) that are of relevance to the undertaking of earthworks have been listed in the table attached to this document as **Appendix 3**.

The Selwyn District Council Building Control Team were contacted in order to discuss any areas of potential overlap between the provisions contained in the Building Act and the earthworks provisions in the Operative Plan. The discussion the Building Control Team did not reveal any matters of significance to this report. As such, the document attached as **Appendix 3** is considered to be sufficient in providing an overview of the relevant parts of the Building Act 2004.

## 4 Canterbury Regional Policy Statement

The Canterbury Regional Policy Statement (CRPS) came into effect in 2013 and contains a series of objectives and policies related to earthworks activities. In particular, the CRPS contains relevant provisions relating to natural hazards, air quality, soil erosion and contaminated land. The most relevant objectives and policies are displayed in the table attached as **Appendix 4**. In addition, the table contains the comparable provisions from the Operative Plan.

These provisions are of particular relevance as sections 74 and 75 of the Resource Management Act 1991 (RMA) sets out that when preparing or changing a district plan, a territorial authority shall have regard to any proposed regional policy statement; and that a district plan must give effect to (and not be inconsistent with) any regional policy statement.

In terms of natural hazards and earthworks, it is noted that the CRPS seeks to avoid or mitigate land uses that would likely result in increased frequency/severity of hazards. In many instances, this policy will include activities such as earthworks on unstable land. Furthermore, the CRPS aims to avoid or mitigate adverse effects from hazard mitigation (such as increased flooding from land remediation works). This policy is reflected in the Operative Plan Objective B3.1.3 as shown in **Appendix 4**.

The CRPS aims to enable discharges of contaminants to air (such as dust from earthworks/stockpiling) provided there are no significant localised adverse effects. Again, this provision is somewhat replicated in the Operative Plan through policies relating to the 'Quality of the Environment' and more specifically those relating to 'Dust'.

The provisions relating to soil erosion in the CRPS seek to prevent any new induced soil erosion and encourage measures to reduce existing induced erosion. While the Operative Plan aligns with the CRPS in terms of preventing erosion, it does not contain any provisions relating to the reduction of existing soil instability.

The CRPS contains two policies relevant to earthworks and contaminated land. Those policies relate broadly to avoiding, remedying or mitigating discharges from contaminated land and any associated adverse effects on the environment or on human health. Similarly, the Operative Plan contains a suite of objectives and policies seeking the same outcomes (Part B1.1 in both the Township and Rural Volumes).

In conclusion, the broad strategic direction of the CRPS in terms of earthworks is largely adhered to within the Operative Plan as a result of the existing objectives and policies in the Plan. The CRPS does not offer guidance specifically in relation to earthworks (aside from those matters outside the scope of this report), but instead contains a series of provisions relating to natural hazards, air quality, soil erosion and contaminated land that may affect earthworks activities depending on their scale and location. It is left up to the district planning framework to set the thresholds in terms of where and at what scale earthworks activities are controlled through the resource consent process.

## 5 Canterbury Land and Water Regional Plan

The purpose of the following discussion is to identify areas where the Canterbury Land and Water Regional Plan (CLWP) may overlap or supersede the Operative Plan in relation to earthworks. The CLWP became operative in August 2017 and directs the use of both land and water within Canterbury. As such, the Regional Plan holds relevance to the undertaking of earthworks in the region.

The table attached as **Appendix 5** contains all of the relevant objectives, policies and rules from the CLWP and compares them with similar provisions in the Operative Plan. As can be seen in the table, for the most part there is little overlap between the two plans. There is some minor overlap in terms of the objectives and policies relating to contaminated land, soil erosion and natural hazards in both plans, although this is not considered to be significant. The CLWP policies focus mostly on protecting the land and groundwater, while the Operative Plan provisions largely aim to protect people.

In terms of the rules of both plans, it is noted that some minor overlapping occurs with regard to solid waste disposal. Under the CLWP, if waste is discharged into or onto land where it may enter water, the activity is categorised as being discretionary. Similarly, the Operative Plan contains measures to control the discharge of certain types of solid waste to land. The rules are less stringent in Rural Zones, although restrictions do still apply. Notwithstanding, the overlap is somewhat insignificant given that the CLWP waste disposal rule relates specifically to

circumstances where waste may enter water. Conversely, the Operative Plan rules cover waste disposal more broadly and are perhaps therefore necessary.

Overall, there is little overlap of significance between the Regional and District Plans. There does not appear to be any circumstances in which a Regional Rule could supersede a rule in the Operative Plan.

## 6 Canterbury Air Regional Plan

The Canterbury Air Regional Plan (CARP) became operative in October 2017. Provisions contained within the CARP relating to dust discharges have particular relevance to the undertaking of earthworks. As such, the following discussion assesses the relevant provisions in the CARP and identifies any areas of overlap with the Operative Plan.

The CARP and Operative Plan provisions relating to dust discharge are compared in the table attached as **Appendix 6**. That table shows a shared policy direction between the CARP and the Township Volume of the Operative Plan, as both documents aim to avoid adverse effects from dust discharges. However, there is one exception in that the Operative Plan (Rural Volume) only seeks to *mitigate* nuisance dust effects on neighbouring dwellings in Rural Zones from stockpiling or earthworks, as opposed to *avoiding* such effects. This is in recognition that various land use activities typically undertaken in the rural area result in the discharge of dusts and that seasonal and temporary discharges of dust are an anticipated part of the rural environment.

In terms of the rules, it is noted that the CARP seeks to reduce dust discharges from unsealed surfaces or unconsolidated land by reducing the permitted area of such surfaces to 1000m<sup>2</sup> (in the absence of a dust management plan). For material with an average particle size of less than 3.5mm no more than 1000t may be stored. In contrast, the Operative Plan seeks to reduce dust discharge from both earthworks and stockpiling by restricting volume of earthworks (2,000m<sup>3</sup> in Living Zones and 5,000m<sup>3</sup> in Business and Rural Zones), rather than the area of land on which it is undertaken. The Operative Plan also requires materials from earthworks (stockpiled or disturbed) to be kept either covered, moist or consolidated; whereas the CARP only aims to ensure any dust discharge does not cause an “offensive or objectionable” effect beyond the property boundary.

It is noted that the CARP does restrict the intensity at which bulk materials may be handled on a site – a matter which is not covered by the Operative Plan rules. Under Rule 7.36 of the CARP, handling<sup>1</sup> of bulk materials is permitted if the following handling rates are met:

- 1) *The handling occurs indoors, or where the handling occurs outdoors the rate of handling does not exceed 100t per hour; or*
- 2) *Where handling occurs outdoors on less than 21 days per calendar year, the rate of handling does not exceed 250t per hour.*

Similarly, the CARP provides a rule in relation to dust discharges from the disposal of clean fill, which again is not an activity specifically controlled within the Operative Plan.

In summary, the CARP and the Operative Plan do not contain any substantial overlap. For the most part, the CARP aims to avoid any offensive or objectionable discharge beyond the property boundary, while the Operative Plan generally seeks to ensure stockpiles and unconsolidated surfaces are screened, covered or consolidated. Initial thoughts are such that the assessment

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<sup>1</sup> Defined in the CARP as follows: ‘means extraction, quarrying, mining, processing, screening, conveying, blasting, or crushing of any material.’

threshold of what constitutes an “offensive or objectionable” effect (as used in the regional planning framework) is not an appropriate planning outcome to pursue through this District Plan Review process.

## 7 Mahaanui Iwi Management Plan

The Mahaanui Iwi Management Plan (IMP) is a document created by the six Papatipu Rūnanga that make up Te Rūnanga o Ngāi Tahu and provides a values-based policy framework for the protection and enhancement of Ngāi Tahu values.

The IMP contains a series of policies relating to the undertaking of earthworks, as summarised in the table below:

Reference	Policy
<b>Section 5.1 – Ranginui</b>	
R1.1	To protect the mauri of air from adverse effects associated with discharge to air activities.
R2.3	To require that local authorities recognise that some discharge to air activities may have particular adverse effects on Ngāi Tahu cultural values, including marae and wāhi tapu.
<b>Section 5.4 – Papatūānuku</b>	
P9.1	To sustain and safeguard the life supporting capacity of soils, mō tātou, ā, mō kā uri ā muri ake nei.
P9.3	To protect the land from induced soil erosion as a result of unsustainable land use and development.
P9.4	To support the following methods and measures to maintain or improve soil organic matter and soil nutrient balance, and prevent soil erosion and soil contamination: <ul style="list-style-type: none"> <li>(a) Matching land use with land capability (i.e. soil type; slope, elevation);</li> <li>(g) Avoiding leaving large areas of land/soil bare during earthworks and construction activities.</li> </ul>
P11.1	To assess proposals for earthworks with particular regard to: <ul style="list-style-type: none"> <li>(a) Potential effects on wāhi tapu and wāhi taonga, known and unknown;</li> <li>(b) Potential effects on waterways, wetlands and waipuna;</li> <li>(c) Potential effects on indigenous biodiversity;</li> <li>(d) Potential effects on natural landforms and features, including ridge lines;</li> <li>(e) Proposed erosion and sediment control measures; and</li> <li>(f) Rehabilitation and remediation plans following earthworks.</li> </ul>
P11.9	To require stringent and enforceable controls on land use and earthworks activities as part of the resource consent process, to protect waterways and waterbodies from sedimentation, including but not limited to: <ul style="list-style-type: none"> <li>(a) The use of buffer zones;</li> <li>(b) Minimising the extent of land cleared and left bare at any given time; and</li> <li>(c) Capture of run-off, and sediment control.</li> </ul>

**Table 7.1 – Summary of relevant Mahaanui IMP policies**

In addition to the above provisions, section 5.4 of the IMP contains guidelines for earthworks during subdivision and development. The guidelines seek to minimise the area of land left bare during earthworks and avoid the removal of excess soil from the subject site.

In summary, the IMP contains a series of policies specific to earthworks that seek to ensure the localised environmental effects of earthworks proposals are appropriately assessed and controlled. More generally, the District Plan aims to ensure air and soils are protected from the adverse effects of activities such as earthworks. Particular regard should be had to unknown

wāhi tapu and wāhi taonga, and to the protection of the mauri of air and the life supporting capacity of soils through the appropriate management of earthworks activity in the Proposed Selwyn District Plan.

## 8 National Environmental Standards and National Policy Statements

The following section assesses all of the relevant National Environmental Standards and National Policy Statements in relation to earthworks activities.

### 8.1 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES for Contaminants in Soil) aims to control the types of activities that can be undertaken on sites that have been identified as contaminated, or that have previously been occupied by activities on the Hazardous Activities and Industries List (HAIL).

Section 5 of the Standard outlines that the NES must be applied when an application is made to undertake a specified 'activity' on a 'piece of land' (being either a potential former or current HAIL site or production land). The specified activities listed in the NES are as follows:

- Removal or replacement of a fuel storage system;
- Sampling of soil;
- Disturbing soil;
- Subdividing land; or
- Changing the use of land.

The NES then categorises the activities into permitted, controlled, restricted discretionary and discretionary activities based on the ability of a proposal to meet certain conditions.

The Operative Selwyn District Plan contains very few provisions in relation to earthworks/soil disturbance on contaminated sites. The use of contaminated land is most commonly referenced in the Objectives and Policies of both the Township and Rural Volumes, including within the following provisions:

#### **Township Volume:**

##### ***Objective B1.1.1***

*Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised.*

##### ***Policy B1.1.3***

*Avoid adverse effects on people's health or well-being from exposure to contaminated soil.*

#### **Rural Volume:**

##### ***Objective B1.1.2***

*People and their property are not affected by contaminated soil or unstable land and any adverse effects on the environment are avoided, remedied or mitigated.*

##### ***Policy B1.1.2***

*Avoid adverse effects on people through exposure to contaminated land and mitigate or remedy any adverse effects on the environment.*

##### ***Policy B1.1.3***



*Encourage the management of contaminated sites so that effects on peoples' health or on the environment are avoided.*

Notwithstanding, the undertaking of earthworks on contaminated land is not stringently controlled. The most relevant rule to earthworks on contaminated land is listed below<sup>2</sup>:

**Rule 10.1 – Activities and Contaminated Land**

*Any activity shall be a permitted activity on any site which contains contaminated land or where past activities on that site include those listed in Appendix 10 except for the following:*

*10.1.1.1 Erecting any dwelling;*

*10.1.1.2 Educational facilities;*

*10.1.1.3 Outdoor recreation activities; and*

*10.1.1.4 Growing commercial food crops or rearing animals.*

It is noted that the above rule does not include any specific reference to earthworks or soil disturbance, nor does it reference the NES for Contaminants in Soil.

In summary, it is considered that while the existing Objectives and Policies in the Operative Plan appear largely consistent with the objectives of the NES for Contaminants in Soil, the control of earthworks/soil disturbance activities on potentially contaminated land is currently managed predominantly through the provisions outlined in the NES, as opposed to those listed in the District Plan.

This is not an inappropriate outcome as the NES for Contaminants in Soil specifically sets out in section 4 that the regulations set out therein deal with territorial functions under section 31 of the RMA. Therefore, the NES regulations sit alongside the District Plan provisions and are administered by the Selwyn District Council. On that basis, there appears to be no obvious reason to duplicate the NES provisions within a district plan.

## 8.2 National Environmental Standard for Electricity Transmission Activities 2010

The National Environmental Standard for Electricity Transmission Activities (NES for Electricity Transmission Activities) seeks to control the way in which electricity transmission structures are installed, removed or maintained.

The NES for Electricity Transmission Activities contains the following definition which is considered relevant:

**Earthworks** – means the disturbance of the surface of land by activities including blading, tracking, boring, contouring, ripping, moving, removing, stockpiling, placing, replacing, recompacting, excavating, cutting, and filling earth (or any other matter constituting the land, such as soil, clay, sand, or rock)

In terms of the provisions of the NES, sections 33 to 36 seek to control earthworks relating to existing transmission lines and prescribe rules in relation to soil erosion and contaminated land. Specifically, the NES prescribes the following conditions:

Reference	Provision	Activity Status
s33(5)	The earthworks must not create or contribute to— (a) instability or subsidence of a slope or another land surface; or (c) drainage problems or flooding of overland flow paths.	Controlled

<sup>2</sup> The same rule is listed as C22.1 in the Township Volume for Business Zones and C9.6 in the Rural Volume.

s33(9)	Earthworks must not be carried out on land that a local authority has identified as containing, or possibly containing, contaminants that pose a risk to the environment.	Restricted Discretionary
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**Table 8.1 – Summary of relevant NES for Electricity Transmission Activities provisions**

In all other instances, electricity transmission activities are permitted under the NES in terms of earthworks, provided they do not breach any regional rules (as stated in section 4(2)(f) of the NES). In some cases, the effects of earthworks are listed as a matter of control/discretion over for activities that are listed as being controlled or restricted discretionary.

### 8.3 National Environmental Standard for Telecommunication Facilities 2016

The National Environmental Standard for Telecommunication Facilities (NES for Telecommunication Facilities) is structured in a similar manner to the NES for Electricity Transmission Activities. The NES contains a section relating specifically to earthworks, although the provisions relate predominantly to matters beyond the scope of this report. In addition, section 54 of the document ensures that regional rules apply to any regulated activity listed in the NES that involves earthworks. Section 54 states:

- 1) *This regulation applies to a regulated activity if it includes earthworks...*
- 2) *This regulation is complied with if the earthworks are carried out in accordance with any applicable regional rules about earthworks.*

Also of note within the NES is section 57, relating to natural hazards rules in District Plans. That section outlines that:

- 1) *A territorial authority cannot make a natural hazard rule that applies to a regulated activity.*
- 2) *A natural hazard rule that was made before these regulations came into force, does not apply in relation to a regulated activity.*
- 3) *In this regulation, natural hazard rule means a district rule that prescribes measures to mitigate the effect of natural hazards in an area identified in the district plan as being subject to 1 or more natural hazards.*

In summary, the NES for Telecommunication Facilities relies predominantly on regional rules in order to control earthworks related matters. Furthermore, the NES ensures that District Plan rules in relation to natural hazards need not be taken into account when installing, removing or maintaining a telecommunication facility.

### 8.4 National Policy Statement for Freshwater Management 2014 (amended 2017)

The National Policy Statement for Freshwater Management addresses issues relating to water quality and quantity within New Zealand's lakes and rivers. The undertaking of earthworks adjacent to waterways is a topic that is specifically listed as being beyond this Scope of Works. On that basis, there are not considered to be any matters of relevance to this report contained within the NPS for Freshwater.

### 8.5 National Policy Statement on Electricity Transmission 2008

The National Policy Statement on Electricity Transmission (NPS on Electricity Transmission) does not include any policies specifically related to the undertaking of earthworks. However, the document does contain a generic objective and associated policies that aim to ensure decision-makers consider the adverse environmental effects of transmission and where possible, ensure that such effects are avoided, remedied or mitigated.

Given the broad nature of the objectives and policies contained within the NPS, they are not considered to be of particular importance in reviewing the earthworks provisions of the Operative Plan. However, given that an NPS is a strategic high-level document, they are worth considering when putting together objectives and policies in relation to earthworks and utilities.

## 9 Cross Boundary Assessment

The following section assesses the provisions contained within the Ashburton, Waimakariri, Hurunui and Christchurch District Plans and compares them to those contained in the Operative Selwyn District Plan.

### 9.1 Ashburton District Plan

The Ashburton District Plan (ADP) became operative on 25 August 2014. The Plan contains provisions relevant to earthworks (and within the scope of this report) in each of the following chapters:

- 03 Rural Zones
- 04 Residential Zones
- 05 Business Zones
- 07 Aquatic Park Chapter
- 09 Subdivision
- 17 Definitions

The relevant provisions (including definitions) in the ADP have been listed against comparable provisions from the Operative Selwyn District Plan in the table attached to this report as **Appendix 7**.

Most notably, the ADP permits small-scale earthworks in Rural Zones, but seeks to maintain control over earthworks in all other Zones. Volume, area and frequency are used as resource consent triggers for large-scale earthworks in the Rural Zones (see Rule 3.9.13 in **Appendix 7**), with a failure to meet the listed conditions resulting in a restricted discretionary activity status.

The relevant rules are more stringent in the Residential and Business Zones, with earthworks falling under a catch-all rule for 'Other Activities' not specifically listed as a categorised activity. As a result, the Council maintains full discretion over any earthworks activities within the Residential and Business Zones. Notwithstanding, more specific earthworks rules relating to the Business and Residential Zones are contained in the Subdivision Rules (as shown in Rules 9.7.3 – 9.8.5 in **Appendix 7**).

In terms of the ADP's consistency with the Operative Plan, it is noted that the mode of delivering earthworks related provisions somewhat differs. The ADP does not rely on a specific 'Earthworks' chapter or section as the Operative Plan does, and instead lists earthworks provisions (specified as performance standards) throughout various chapters of the Plan.

It is also noted that the ADP permits small-scale earthworks and relies on a restricted discretionary activity status for larger earthworks in order to control any associated environmental effects such as the remediation of a site after substantial earthworks. In contrast, the Operative Plan prescribes a series of additional rules within an 'Earthworks' section that seek to control the effects of earthworks activities, beyond those rules that control volume and intensity. For example, Rule 1.7.1.3 in the Operative Plan outlines measures to be

taken to remediate the land once earthworks have ceased. In the ADP, land remediation has been left as a matter of discretion.

Also of note is the control of clean fill within Rural Zones in the ADP (Rule 3.8.2). Contrastingly, the Operative Plan does not contain any specific controls relating to clean fill and instead relies on the rules relating to earthworks (Rule 1.7 in the Rural Volume) and waste disposal (Rule 8.1 in the Rural Volume).

The permitted volumes for earthworks in each plan are largely similar. However, there are differences in the permitted intensity of earthworks activities. For example, the ADP allows for a maximum earthworks volume of 5,000m<sup>3</sup> on any one site *per annum* in Rural Zones, while the Operative Plan provides for a maximum volume of 5,000m<sup>3</sup> *per project* (see Rule 3.9.13 of the ADP and Rule 1.7 of the Operative Plan in **Appendix 7**).

## 9.2 Waimakariri District Plan

The provisions within the Waimakariri District Plan (WDP) that are considered relevant to earthworks are predominantly contained within the 'Land and Water Margins' Chapters of the Plan. Some zone-specific provisions relating to earthworks are scattered throughout the Plan, although these provisions are considered to relate to unique localities within the Waimakariri District and are not considered relevant to the Selwyn District. The relevant Definitions, Objectives, Policies and Rules of the WDP, as well as the comparative provisions from the Operative Selwyn District Plan, are displayed in **Appendix 8** of this document.

While the relevant Objectives and Policies of the WDP generally seek similar outcomes to those contained in the Operative Plan, the earthworks rules in the WDP somewhat differ. It is noted that in both plans earthworks are a permitted activity in all zones provided the activity can meet a series of listed conditions. However, the conditions that are required to be met differ between the two plans.

In the WDP, the stockpiling of soil over vegetation is restricted to 1000m<sup>2</sup>. All other stockpiling does not appear to be controlled within the Plan. The Operative Plan contains stockpiling rules relating to the Business and Living Zones, as well as separate provisions for the Rural Zones. Those rules do not restrict the volume of stockpiled material, but rather aim to prevent the potential visual and/or dust effects of the activity by requiring stockpiles to be screened/covered/consolidated.

In terms of earthworks volumes, the WDP allows for the disturbance of not more than 1,000m<sup>2</sup> of material per hectare in Rural Zones. Any non-compliance with this condition results in the activity being assessed as restricted discretionary. This limit is far more stringent than that listed in the Operative Plan which allows for an earthworks volume of 5,000m<sup>3</sup> per project in Rural Zones. However, in Residential Zones the WDP allows for 300m<sup>3</sup> of material disturbance/excavation per 1,000m<sup>2</sup> (3,000m<sup>3</sup>/1ha). In contrast, the Operative Plan allows for 2,000m<sup>3</sup> of earthworks per project.

As shown in the above summary, and the table attached in **Appendix 8**, there are few similarities in the rules packages of the WDP and the Operative Plan in terms of earthworks and currently there is little cross-boundary consistency between the two Districts. Notwithstanding, it should be noted that the Waimakariri District Council are currently in the process of a District Plan Review. On that basis, little importance should be placed on the provisions contained within the current WDP.

### 9.3 Hurunui District Plan

The Hurunui District Plan (HDP), which became operative in 2003, contains very few provisions considered relevant to earthworks.<sup>3</sup> The relevant objectives, policies and rules of the HDP are compared to those contained in the Operative Selwyn District Plan in **Appendix 9**.

It is noted that the definition of 'earthworks' in the HDP specifically excludes 'waste', although waste is not a term defined within the Plan. As such, any provisions in the HDP relating to the deposition of waste (where they do not refer to cleanfill) are not considered relevant.

Both the policies and rules of the HDP are somewhat broad and do not centre mainly around the avoidance of soil erosion as well as any impact of excavation on amenity. Volumes of earthworks are not significantly restricted in the HDP, with the only restrictions applying to earthworks above 900m in altitude, or the clearing of more than 5,000m<sup>2</sup> of vegetation.

On the basis of the above, it is considered that there is little cross-boundary consistency between the current HDP and Operative Plan and the HDP is considered to hold little relevance in terms of earthworks controls for the Selwyn District Plan Review.

### 9.4 Christchurch District Plan

The Christchurch District Plan (CDP) contains a significant number of provisions relating to earthworks, all of which have been listed in the table attached as **Appendix 10**. The CDP addresses earthworks related issues in a dedicated section (Chapter 8) and also includes a series of controls relating to earthworks within flood management areas.

Included in **Appendix 10** are definitions from the CDP that are considered relevant to earthworks activities. It is noted that CDP defines earthworks and clean fill in a similar manner to the existing definitions in the Operative Plan, but also includes separate definitions for disturbance of soil, excavation and filling. In terms of the objectives and policies of the two plans, it is considered that the CDP provides a more comprehensive policy direction that takes into account the positive and negative effects of earthworks.

It is noted that the CDP maintains a high-level of control over earthworks activities in the district, predominantly in order to limit potential flood hazards. Although earthworks near waterways are outside the scope of this report, it is considered pertinent to note the stringent rules package relating to earthworks in flood management areas, as shown under Rule 5.4.1.1 in **Appendix 10**. The level of control withheld by Christchurch City Council over earthworks in flood prone areas is far greater than any level of control enabled by the Operative Plan rules package.

In addition, the CDP generally contains more stringent limits in terms of earthworks volumes in Residential, Rural and Commercial/Industrial Zones when compared to the Operative Plan. As shown in **Appendix 10**, the CDP allows for 20m<sup>3</sup> of earthworks per site in Residential Zones, compared to some 2,000m<sup>3</sup> per project for Living Zones in the Operative Plan. In terms of earthworks in Rural Zones, it is noted that the CDP allows for 100m<sup>3</sup> *per hectare*, while the Operative Plan provides for 5,000m<sup>3</sup> *per project*. On that basis, the CDP potentially provides for a greater volume of earthworks on large rural sites (e.g. sites >50ha), but the earthworks will need to be spread over a wider area. In contrast, the Operative Plan caps earthworks at a volume of 5,000m<sup>3</sup> regardless of site size, although the earthworks can occur in an intensified area on a site with little control.

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<sup>3</sup> It is noted that many of the provisions relate to mining, quarrying and earthworks near waterways which are matters beyond the scope of this report.

The rules relating to earthworks contained in Chapter 8 of the CDP have a series of exemptions attached under Rule 8.9.3. Most notably, the exemptions allow for:

*Any earthworks subject to an approved building consent where they occur wholly within the footprint of the building.*

While it appears that the intent of this rule is to allow any earthworks activities that are covered by the Building Act to be exempt from District Plan provisions, the rule is largely ineffective. For the most part, an applicant would not have obtained an approved building consent prior to having the assurance of an approved resource consent. Therefore, there would likely be very few circumstances in which this exemption can be applied.

Other exemptions of note under Rule 8.9.3 of the CDP include matters relating to earthworks and:

- The establishment, repair or replacement of a utility;
- Geotechnical assessments;
- Earthworks undertaken by the Regional or City Council to upgrade or maintain one of their own parks/reserves.

Another matter worth noting is the way in which the CDP allows the NES for Contaminants in Soil to control the undertaking of earthworks on potentially contaminated sites. The CDP contains objectives and policies addressing soil contamination issues, but does not provide any rules relating to the matter. Instead, under Section 4.2.3 'Other Methods' the Plan specifically refers to the NES as the sole method for identifying contaminated land and the appropriate action to be taken. As discussed above this is considered to be an appropriate approach given the relationship of the NES to the functions of a territorial authority. It is noted that the Operative Plan does not currently provide a reference to the NES for Contaminants in Soil in seeking to control earthworks activities.

In conclusion, the CDP structure in terms of the layout of the various standards relating to earthworks is considered to provide a useful guide for the review of earthworks provisions during the Selwyn District Plan Review. Given the highly urbanised environment of much of the Christchurch District, in combination with large areas of flood prone land, the rules are generally considered overly stringent and may provide an unnecessary level of control if a similar rules package were to be implemented in the Selwyn District. However, the structure of the CDP and its intention of allowing earthworks where necessary will provide a useful template for reviewing the Operative Plan rules package relating to earthworks.

## 9.5 Summary Cross Boundary Matters

Based on the above assessment of each of the District Plans from the surrounding areas, it is considered that very little cross-boundary consistency exists in relation to earthworks provisions. While each District Council appears to seek similar outcomes through various objectives and policies, each Plan utilises a different approach to controlling earthworks, both in terms of the structure of planning provisions and the level of control that is maintained. In no instance were any of the specified volumes, intensities or areas for permitted earthworks activities identical.

The Ashburton and Christchurch District Plans are the most recently reviewed documents from the four surrounding districts. These plans provide a strong baseline for the establishment of an earthworks rules package and will be useful reference points in reviewing the Operative Plan. The level of control obtained over earthworks in the ADP is considered to be more relevant and appropriate to the Selwyn District compared to the stringent rules of the CDP.

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## 10 Part One Summary

It is considered that matters of significant relevance to the review of earthworks rules in the Operative Plan are contained within the CRPS, the CARP, the NES for Contaminants in Soil and the Ashburton and Christchurch District Plans. The CRPS is a high-level document and as such, the provisions relating to natural hazards, air quality, soil erosion and contaminated land within the Policy Statement should be taken into account when considering any earthworks objectives and policies for Selwyn.

In order to reduce dust emissions, the CARP contains rules aimed at controlling the area over which earthworks can occur and the volume/intensity at which materials can be handled. These rules should be taken into account when considering any change to permitted earthworks volumes in the Operative Plan. In addition, the NES for Contaminants in Soil contains provisions relating to the identification and control of contaminated land and has been utilised by the Christchurch City Council as the main document for controlling earthworks activities on contaminated soils.

## PART TWO



## 11 Part Two Introduction

The purpose of Part Two is to firstly identify the adverse environmental effects which can arise from earthworks activities and secondly, to evaluate the effectiveness of the relevant Operative Plan provisions and definitions in addressing the identified environmental effects.

## 12 Identification of Adverse Environmental Effects from Earthworks

The following section seeks to identify all of the relevant adverse environmental effects that have the potential to arise from the undertaking of earthworks activities. The assessment takes into consideration any activity that falls under the existing definition of 'earthworks' listed within the Operative Selwyn District Plan and also considers the stockpiling of material. It should be noted that the assessment does not consider earthworks-related matters that are specifically excluded by the provided Scope of Work for this report, or any adverse effects that fall solely under the jurisdiction of the Canterbury Regional Council.

The potential adverse effects arising from earthworks and stockpiling discussed in this report relate to the following matters:

- Amenity values;
- Natural hazards;
- Ecological values;
- Cultural values; and
- Hazardous substances and contaminated soil.

Each of the abovementioned matters are discussed separately, below:

### 12.1 Amenity Values

Amenity values are defined in the Resource Management Act 1991 (RMA) as meaning:

*those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.*

Taking into account the above definition, it is considered that the inherent dust discharges and the potential visual effects on a landscape generally arising from earthworks and stockpiling activities have the potential to impact on amenity values both onsite and beyond the property boundary. The extent of any adverse effects on amenity generally depends on the context of the receiving environment, the intensity and scale of the earthworks activities and any mitigation measures in place.

#### **Dust Nuisance**

The excavation, deposition, disturbance or stockpiling of soil, gravel, or any other earth-based mineral containing similar characteristics inevitably results in the discharge of dust particles that have the potential to impact on amenity values within the receiving locality. Dust particles can be easily carried by wind beyond the property boundary on which the discharge is occurring and can damage crops and vegetation, dirty buildings and vehicles, reduce visibility and general air quality, and in some extreme cases, cause or exacerbate health issues. Furthermore, machinery and vehicles (such as trucks and excavators) used for the undertaking of earthworks have the potential to carry dust off site and deposit it on the surrounding road network where it can easily become a nuisance or be deposited by wind elsewhere in the surrounding area.

Common measures for the control of dust discharges from earthworks and the associated impacts on amenity include:

- Limiting the volume, intensity and/or area of earthworks and stockpiling;
- Applying water to unconsolidated or stockpiled materials, or the covering of such materials, during dry or windy periods;
- Implementing minimum separation distances between earthworks and stockpiling activities and property boundaries or nearby sensitive activities;
- Implementing timeframes to ensure dust discharges and associated amenity impacts are only temporary.

As an aside, it should be noted that many of the adverse effects arising from dust discharges, including those associated with contaminants in air, are already controlled by the CRC.

### **Visual Amenity**

A further consideration is the way in which earthworks and stockpiling can be visually obtrusive resulting in adverse effects on the visual amenity of the receiving environment. The excavation and removal of material from a site in large quantities can result in a noticeable (and in some cases, undesirable) alteration to the topography of a landscape. This can also result in a loss of privacy for neighbouring properties as a result of changes to natural ground level. Earthworks activities such as the construction of storage ponds or farm tracks on areas visible from beyond the property boundary can also impact on the outlook from adjoining sites. This effect is further exacerbated when it occurs on a hillside or ridgeline. Furthermore, in instances where land that has been subject to earthworks is not appropriately remediated through methods such as top soiling and replanting, the visual appearance of the site and wider landscape can be severely impacted.

The deposition of fill or the stockpiling of material can also create adverse effects on visual amenity. Sites containing areas covered by fill (including clean fill) can be visually obtrusive to those in the receiving locality, particularly where such an activity is out of character with the surrounding environment (such as within urban landscapes). Similarly, the stockpiling of material can result in adverse visual effects when stockpiles are not effectively located or screened from adjacent sites. Large areas of soil or other earth-based minerals can appear out of place within certain environments and can impact on the outlook from neighbouring properties.

A number of measures are able to be implemented to avoid or mitigate potential visual amenity impacts arising from earthworks. These include the following measures:

- Screening the activity from view from beyond the property boundary;
- Implementing minimum separation distances between earthworks and stockpiling activities and property boundaries or nearby sensitive activities;
- Limiting the volume or area of earthworks and stockpiling per site;
- Implementing timeframes to ensure visual/landscape amenity impacts are only temporary;
- Ensuring sites are properly remediated following the conclusion of any earthworks or stockpiling.

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## 12.2 Natural Hazards

Earthworks activities have the potential to create land instability and soil erosion and can also cause or exacerbate flood hazards.

### **Land Instability**

In terms of land instability and soil erosion, it is noted that adverse effects from the excavation of material generally occurs as a result of the depth of excavation being too great or the gradient of the land being too steep. In instances where the excavation depth is significant, there is a risk that the excavated pit walls could become unstable and slump in towards the centre of the pit. Conversely, if the gradient of the land to be excavated is too great then the land could become unstable and soil erosion/slumping could occur.

In terms of the filling of land, issues can arise when fill is not appropriately compacted, allowing slumping and erosion to occur. Similarly, land can become unstable when inappropriate fill materials are used, particularly on sites with a steep gradient, or when sites are not appropriately remediated following excavation. An example of an appropriate remediation technique is the planting of vegetation to stabilise soil.

The extent of all of the abovementioned adverse effects are exacerbated in areas of already unstable or erosion-prone land.

Common measures used to control the potential effects of earthworks on land instability and soil erosion include the following:

- Identifying potentially unstable or erosion prone land and restricting earthworks activities in those locations;
- Limiting the maximum gradient of pit walls when excavating a site to prevent internal slumping;
- Specifying a maximum slope gradient on which earthworks are permitted to occur;
- Identifying appropriate fill methods and materials;
- Ensuring sites are appropriately remediated to avoid land instability post-earthworks.

### **Flood Hazards**

Given that earthworks can result in an alteration to the topography of land, there is potential for the altered land form to create or exacerbate flooding. Depending on the locality of the earthworks, any associated flooding can have significant adverse effects.

Most commonly, the effects in terms of flooding are caused by the cut or fill of material within or nearby waterways – a matter which is outside this Scope of Work. However, in some instances, an alteration to the existing land form can change drainage patterns and impact the location/direction of surface flooding following a heavy rainfall event, with subsequent adverse effects on adjoining land within the catchment.

Measures to ensure the cut and/or fill of material does not create or exacerbate the adverse effects of surface flooding include:

- Identifying areas of potentially flood prone land and restricting earthworks within those areas;
- Maintaining discretion over large-scale earthworks to allow Council to assess any potential flood impacts.

### 12.3 Ecological Values

Earthworks and stockpiling activities can have adverse effects on the ecology of the surrounding area, particularly in relation to waterways. While earthworks adjacent to waterways is a matter that is beyond the Scope of Work for this project, it should be noted that earthworks activities can result in run-off or sediment infiltrating the Council stormwater network and subsequently being discharged into waterways. Sedimentation can reduce water quality and impact on the life-supporting capacity of a waterbody.

In addition to the potential effects on waterways, earthworks can also result in the loss of vegetation through excavation or vegetation clearance.

### 12.4 Cultural Values

The most common adverse cultural effects arising from earthworks activities generally relate to activities within culturally significant locations, silent file areas and waterways identified as Ngā Wai, which are matters beyond the Scope of Work for this project. However, it is possible that not every Wāhi Tapu, Wāhi Taonga or archaeologically significant site has been identified in the District Plan. Therefore, there is potential for cultural values to be adversely affected outside of known culturally sensitive areas, particularly in relation to excavation activities. In most cases, the “Protocols on Accidental Discovery of Archaeological Sites” are implemented to limit the potential for such effects.

### 12.5 Hazardous Substances and Contaminated Soil

Adverse effects may occur in circumstances where earthworks are undertaken on a contaminated site. The disturbance, excavation and/or removal of contaminated soil can be a risk to human or animal health due to exposure to the contaminant(s).

Furthermore, while earthworks relate generally to the cut, fill or disturbance of natural materials, there is potential for materials to be hazardous. In some instances, hazardous substances can be (accidentally or otherwise) deposited to land as fill. This has the potential to contaminate land and become a risk to human or animal health.

## 13 Evaluation of the Operative Selwyn District Plan Earthworks Provisions

This section evaluates the extent to which the Operative Selwyn District Plan rules remain reasonable and appropriate as thresholds to control the potential effects of earthworks outlined in Section 12 above.

In addition to our own independent analysis of the District Plan rules, the following evaluation has been informed by consultation with the SDC compliance and monitoring team to determine the nature of any complaints made in relation to consented earthworks activities and relevant enforcement issues. Furthermore, a historical record has been provided by SDC detailing the number, nature and scale of earthworks-related resource consent applications received by Council since 2006 (attached as **Appendix 11**).<sup>4</sup> Lastly, SDC have provided a SWOT analysis that has identified a number of issues in relation to the use of soils in the District (attached as **Appendix 12**). The relevant issues have been given greater consideration throughout this section, below.

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<sup>4</sup> It is important to specify that all numbers used in Section 13 and provided by SDC are approximate. Limitations in terms of the recording of historical resource consent data over the years has meant that the statistics are a useful guideline, as opposed to an entirely accurate data set.

### 13.1 Number and Nature of Resource Consents for Earthworks Since 2006

Based on the data obtained from SDC, which dates back to 2006, the Council have received a total of 6601 resource consent applications, 201 (3%) of which have been specifically in relation to earthworks.<sup>5</sup> On that basis, the existing provisions for earthworks in the Operative Plan are not considered to have triggered a significant number of resource consent applications for activities relating only to earthworks. Notwithstanding, it is likely that numerous large-scale developments have included ancillary earthworks activities and have therefore been subject to the relevant controls contained in the Plan. In addition, there has undoubtedly been a number of earthworks activities undertaken in the District that has triggered the requirements for resource consent, but either through negligence or intention, have not been the subject of a consent application.

The data attached in **Appendix 11** shows that of the applications made for earthworks consents, over half (109) have been in relation to urban subdivision activities. There are a number of likely reasons for this, not least of which is the significant level of subdivision activity occurring in the District since 2006 in townships such as Rolleston, Lincoln and West Melton. However, an additional reason likely relates to the exemptions to earthworks rules contained in the Plan.

As explained in greater detail later in this section, the Plan allows digging for building foundations and landscaping to be exempt from the earthworks related rules in Business and Living Zones. On that basis, earthworks for the construction of buildings or structures are often permitted, regardless of the size and scale of the building proposed.

In terms of the location of earthworks, it is noted that Living Zones (Living 1-3 and Living X, Z combined) have been the subject of the most earthworks consent applications in the past 10 years with a total of 93 received by Council. Rural Zones were subject to 83 applications, while there were only 11 in Business Zones. The large number of earthworks consents in the Living Zones can likely be explained by the high level of subdivision activity in combination with more stringent controls (including a maximum earthworks volume of 2,000m<sup>3</sup> per project). The number of consent applications in Rural Zones is not unexpected given the nature of activities that regularly occur in the Zone (including the construction of irrigation water storage ponds).

On the basis of the above analysis, it is considered that the data covering resource consent applications for earthworks since 2006 does not give rise to any significant issues with the existing District Plan rules. The number of applications relating to earthworks for subdivisions is a point of interest and should be considered when recommending permitted activity standards for the Proposed Plan. However, our analysis of the data and the Plan rules has not provided any conclusive evidence to suggest that the earthworks rules are too stringent for subdivision activities.

Furthermore, communication with the Compliance and Monitoring team at SDC did not uncover any significant patterns in terms of complaints or monitoring issues in the past 10 years. While a small number of complaints had been laid in relation to dust effects from the construction of certain subdivisions, these effects were considered to be temporary and reasonable by the Council. The Compliance and Monitoring team did not raise any specific issues in terms of the existing rules package.

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<sup>5</sup> It should be noted that this statistic relates only to resource consent applications that specifically relate to earthworks and does not take into account applications that have included earthworks as an ancillary part of a proposal.

## 13.2 Identified Issues with Existing Rules in the Operative Selwyn District Plan

It should be noted that the existing earthworks provisions in the Operative Plan are generally able to satisfy the policy outcomes sought by the Canterbury Regional Policy Statement (CRPS). One notable exception is the limited emphasis placed on Ngāi Tahu cultural values in relation to soil – an issue that is covered in greater detail below. Notwithstanding, provided the mauri of soil is accounted for in the provisions of the Proposed Selwyn District Plan, the matters contained in the Operative Plan relating to earthworks provides a suitable template for ensuring that the policy outcomes sought by the CRPS are provided for.<sup>6</sup>

There are, however, several issues that need to be addressed to ensure the provisions of the Proposed Plan relating to earthworks are adequate and reasonable as thresholds beyond which resource consent is required. Those issues are identified below along with a series of examples.

### 13.2.1 Thresholds for Earthworks Activities

The way in which the thresholds for earthworks volumes are measured in the existing rules package is a matter that has been identified as problematic. The Operative Plan specifies upper-limits for permitted earthworks volumes and any proposed earthworks that exceed the specified volume in the relevant permitted activity standard requires resource consent. The Operative Plan provisions outline the following earthworks volumes as thresholds:

- Living Zones = 2,000m<sup>3</sup> per project;<sup>7</sup>
- Business and Rural Zones = 5,000m<sup>3</sup> per project;

It is noted that in restricting earthworks activities to a maximum specified volume ‘per project’, a number of ambiguities arise in terms of the way the rule is applied. Clearly, the way in which the definition of ‘project’ is interpreted has a significant influence on the application of the rule, particularly in relation to large scale activities. The definition of ‘project’ in the Operative Plan is as follows:

*All earthworks undertaken as part of, or ancillary to, the completion of one particular activity or the construction of a building or structure, whether that activity is undertaken or the building or structure is erected continuously or in discrete stages, and whether it occurs in one continuous area or is separated by land which is not disturbed by earthworks.*

The wording of the definition is such that it potentially allows for any number of projects to be undertaken across an unidentified land area. Conversely, a different interpretation of the rule could require resource consent for two unrelated earthworks activities if they were deemed to contribute to one overall project. While the definition attempts to package together all earthworks undertaken “as part of, or ancillary to” an activity, it remains unclear as to what constitutes a single activity.

This is particularly problematic in dealing with large scale developments which can often involve several components, each of which can be very different in nature. For example, Fonterra Co-Operative Ltd and Synlait Milk Ltd both currently operate dairy processing plants on large Rural Zoned sites in the District. Given the size of the two sites, the respective owners also actively farm the land surrounding the factories.

The existing rule in relation to the permitted volume of earthworks could give rise to a situation whereby one of the dairy processing plant operators aims to extend the existing processing

<sup>6</sup> Section 75(3)(c) of the RMA requires district plans to “give effect to any Regional Policy Statement”.

<sup>7</sup> It is noted that this threshold does not apply to the Living 1A or 2A Zones. These zones are subject to more stringent earthworks rules due to the high level of flood risk in these areas.



factory and at the same time, seeks to construct a storage pond to serve the farming activities occurring on site. Both activities would require the undertaking of earthworks and could potentially be constructed in similar areas of the site. If the two activities were each to be assessed on an individual basis (as two separate, unrelated activities), it is possible that neither activity would exceed the threshold of 5,000m<sup>3</sup> of earthworks and would therefore comply with the relevant permitted standard. As such, neither activity would come under the control of Council, despite the undertaking of a potentially significant cumulative volume of earthworks.

Conversely, an activity which is due to occur over a range of sites may be required to apply for resource consent for a cumulative volume of earthworks, despite significant separation distances between earthworks activities on each site. An example of this could occur in relation to a large irrigation scheme development (such as Central Plains Water), where the associated earthworks could be undertaken across a range of sites in the District with significant separation distances between each location. Despite the separation distances, the construction activities could be considered to be “part of the completion of one particular activity.” The cumulative earthworks would therefore form part of one project and would be subject to the 5,000m<sup>3</sup> threshold. Despite the effects of the earthworks not being cumulative, the need to calculate the earthworks volumes as a cumulative figure would likely give rise to a significant non-compliance which would need to be reflected in the associated assessment of effects.

Based on the above discussion, it is considered that the potential for inconsistencies to arise when interpreting and implementing the rules relating to earthworks volumes could allow for two or more earthworks activities with more than minor cumulative effects to occur simultaneously on a site as of right. Conversely, the rules may require resource consent for the undertaken of earthworks in relation to two or more very separate activities if they were assessed cumulatively as part of a larger ‘project’.

### 13.2.2 Visual Effects of Stockpiled Materials

The Operative Plan contains a variety of rules relating to stockpiled material for Business and Living Zones, listed within both the Earthworks and Activities Chapters of the Plan.<sup>8</sup> The relevant rules relate to dust control and the requirement to screen outdoor storage activities. It is noted that in Business Zones the storage of materials for “*construction, repair or landscaping work on the same site, for up to 4 months in any 12-month period*” is exempt from rules relating to screening, which may allow for some temporary visual effects to occur.<sup>9</sup>

Conversely, the Plan rules for Rural Zones do not currently contain any controls in relation to the potential visual effects of stockpiled materials on a site. Most notably, the Plan doesn’t require any screening or maximum setback distance for stockpiles.

The main restriction in terms of stockpiling in Rural Zones relates primarily to the requirement to keep stockpiled material moist and consolidated/covered, ensuring dust emissions are reduced.<sup>10</sup> However, there is an absence of control over the potential visual effects of large stockpiles, which can be obtrusive when viewed from neighbouring sites and public spaces.

While the thresholds in terms of maximum permitted earthworks volumes apply for the initial deposition of stockpiled material on a site, there are no controls in relation to the maximum height, the required level of screening or the location of stockpiles (such as setback distances

<sup>8</sup> Specifically, Rules 2.1.1 and 10.11 for Living Zones and Rules 14.1.1 and 22.6 for Business Zones.

<sup>9</sup> As an aside, it is considered appropriate to include all rules relating to the stockpiling of material under a single section, as opposed to the current layout of the Plan whereby the stockpiling rules for Living and Business Zones are listed in separate chapters.

<sup>10</sup> Rule 2.1.1.1 – 2.1.1.2 (Living Zones), Rule 14.1.1.1 – 14.1.1.2 (Business Zones) and Rule 1.7.1.4 (Rural Zones).

from boundaries). As such, up to 5,000m<sup>3</sup> of material<sup>11</sup> can be stockpiled immediately adjacent to an internal or road boundary as of right, with the only relevant permitted activity standard relating to the requirement to control dust emissions within 100m of a neighbouring dwelling.

It is accepted that the open spacious character of the rural environment generally allows for the visual effects of stockpiled material to be more readily absorbed, however it is considered appropriate to implement some level of control to protect the outlook and visual amenity of the receiving environment, particularly in relation to stockpile activities near dwellings on adjoining properties.

### **13.2.3 Exemptions from Earthworks Rules**

The Operative District Plan exempts a range of activities from the earthworks rules in certain zones, including landscaping of gardens and lawns, digging building foundations and ducting cables. However, issues have been identified in terms of the extent to which certain earthworks activities remain uncontrolled as a result of the exemptions. Furthermore, the exemptions in the Operative Plan contain inconsistencies which should be addressed in formulating the Proposed Plan.

As noted above, the Operative Plan (Township Volume) exempts the digging of building foundations and the undertaking of landscaping from the earthworks rules.<sup>12</sup> This has the potential to allow for a significant volume of uncontrolled earthworks relating to the abovementioned activities. Stringent development controls limit the scale of construction in Living Zones and as a result, any associated earthworks-related effects from exempt activities are generally short-term and less than minor. However, Business Zones in the District have the capacity to accommodate larger-scale projects requiring significant earthworks, given the less restrictive nature of the bulk and location standards for those zones. Without the need to apply the earthworks rules (contained in Chapter 14 for Business Zones) when digging building foundations or landscaping gardens and lawns, many projects can result in the disturbance of a significant volume of material without any control from Council.

This issue is exemplified by the development of the Westland Co-operative Dairy Company ('Westland Milk') dairy processing plant on Business Zoned land in Rolleston (consented by way of RC125217). The construction of the plant resulted in some 17,000m<sup>3</sup> of earthworks being undertaken on site at a cut depth of up to 2.5m, predominantly to build foundations for three milk dryers and two boilers. However, approximately 12,300m<sup>3</sup> of earthworks did not trigger the need for consent as the soil disturbance and vertical cut depth related to the construction of building foundations and was therefore exempt. On that basis, only 4,700m<sup>3</sup> of proposed earthworks was able to be assessed under the Plan rules, resulting in a total volume that was permitted under the relevant standard.

In this instance, a conservative approach was taken by the applicant whereby all earthworks (17,000m<sup>3</sup> – including digging for building foundations) were assessed as being non-compliant. The effects of the proposed earthworks were subsequently controlled through the inclusion of a volunteered consent condition which required an Environmental Construction Management Plan to be prepared (Condition 33). Notwithstanding, the current exemptions for Business Zones could allow for large-scale earthworks, such as those which occurred at the Westland Milk site, to proceed without any control of the earthworks activity beyond that addressed by way of the Building Consent documentation.

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<sup>11</sup> 2,000m<sup>3</sup> in Living Zones.

<sup>12</sup> It is noted that while landscaping of gardens and lawns is exempt in the Rural Volume, earthworks in relation to building foundations are not included in the exemptions for Rural Zones.



There is also an issue in relation to the way in which the exemptions are written into in the Operative Plan. The exemptions relating to the Living and Business Zones are listed at the start of the relevant earthworks chapters (Chapter 2 and Chapter 14). While both sets of exemptions relate to the same activities, there are some small discrepancies in the way they are laid out. In terms of the Rural Volume, exemptions are listed under both the relevant chapter (Chapter 1) and the definition for 'earthworks'. However, only some of the exemptions contained in the definition match up with the exemptions listed at the start of Chapter 1. The inconsistencies in relation to the lay out of the listed exemptions for earthworks has the potential to result in the incorrect application of the earthworks rules by users of the District Plan and should be addressed in the upcoming District Plan Review.

#### 13.2.4 Requirements for Land Remediation

Following the completion of earthworks, Rule 1.7.1.3 requires sites in Rural Zones to be:

- (a) *Filled and recontoured to the same state as the surrounding land; and*
- (b) *Replanted with vegetation which is the same as, or of similar species to, that which existed on the site prior to the earthworks taking place.*

While it is important to ensure land is appropriately remediated following the completion of earthworks, it is noted that in some cases, remediation is not entirely possible. The Plan excludes earthworks associated with the preparation of sites for buildings, roads, tracks, tree or crop planting from the abovementioned rule. However, there is no such exclusion for earthworks associated with storage ponds or similar activities. Clearly, it is not feasible for storage ponds to be filled or replanted once they have been excavated. The above remediation rule is also difficult to apply to the construction of earth bunds, given that they are not able to be recontoured to the same state as the surrounding land. On that basis, it is considered appropriate to review the existing remediation rule for Rural Zones and include alternative permitted activity standards for appropriate earthworks activities with minimal adverse effects where the existing performance standards do not apply (including land bunds and storage ponds).

In terms of the Living and Business Zones, it is noted that Rule 2.1.1.3 (Living Zones) and Rule 14.1.1.3 (Business Zones) address the need to remediate land. Both rules require land to either be built upon, sealed, landscaped or recontoured and replanted within 12 months of the commencement of earthworks. There are no listed exceptions to the rules, although it is noted that they do provide a greater range of options for remediation. Unlike the equivalent Rural Zones, the remediation rules for Living and Business Zones would allow for earth bunds to be landscaped as a form of remediation, rather than requiring them to be recontoured. However, as with the Rural rule, there is not an appropriate remediation option available for storage ponds or an activity of a similar nature.

#### 13.2.5 Cultural Effects of Soil Disturbance

There is a notable absence of provisions seeking to protect the cultural values of soil within the Operative Plan. While a series of rules control activities occurring within culturally sensitive areas, there are no such policies or rules relating to potential cultural effects from soil disturbance outside of those areas.

Policy P9.1 in the Mahaanui Iwi Management Plan seeks to “*sustain and safeguard the life supporting capacity of soils, mō tātou, ā, mō kā uri ā muri ake nei.*”<sup>13</sup> Subsequent policies aim to ensure this outcome is achieved by protecting land from soil erosion and soil contamination.

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<sup>13</sup> Section 5.4 – Discharge to Land – P9.1.

Furthermore, it is noted that Chapter 15 of the CRPS aims to ensure the “*maintenance and improvement of the quality of Canterbury’s soil to safeguard their mauri.*” Again, the relevant associated policies relate to the prevention of soil contamination and instability.

While the Operative Plan generally seeks similar outcomes in terms of preventing soil erosion and contamination, it is noted that the Plan does not contain any policy direction or rule that outlines the need to consider the impact of soil disturbance on the life supporting capacity or the mauri of soils when activities are proposed to occur outside culturally sensitive areas.

On that basis, it is considered important that the Proposed Plan addresses the potential for earthworks activities to have an effect on cultural values by directly referring to the mauri and life supporting capacity of soils in the District.

### 13.2.6 Contaminated Land

The rules in the Operative Plan for Living and Business Zones do not seek to control earthworks on (potentially) contaminated land. Rule 10.1 (Living Zones) and Rule 22.1 (Business Zones) permit almost all activities on contaminated sites, aside from four activities which are listed as being restricted discretionary. However, despite the potential for the disturbance of soil to create adverse health effects, earthworks are permitted under the rules.

In Rural Zones, the removal of any soil or earth from a site that is contaminated is a restricted discretionary activity under Rule 1.2.2. However, this control is not adequate to ensure the protection of human and animal health on sites where earthworks are to occur, given that contaminated soil can be disturbed as of right provided the soil is not removed from the site. Again, it is considered important to reference the NESCS at the very least.

The provisions contained in the Operative Plan relating to contaminated land were promulgated prior to the introduction of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) and the Listed Land Use Register (LLUR) administered by Environment Canterbury.

There is now considered to be no requirement (or need) for the Council to include detailed provisions regarding contaminated land in the District Plan. Section 30 of the RMA makes it clear that the identification and monitoring of contaminated land is a regional function, which is undertaken by way of the LLUR.

However, the District Council remains responsible for the management of adverse effects of the development, subdivision or use of contaminated land through administration of the NESCS. This means there is no need to include any rules in the District Plan. Furthermore, section 44A of the RMA specifically requires that a District Plan may not duplicate or conflict with a National Environmental Standard.

## 14 Evaluation of the Operative Selwyn District Plan Definitions

The following section evaluates the effectiveness of the existing definitions considered relevant to earthworks within the Operative Selwyn District Plan and considers any worthwhile changes. The evaluation concludes with a summary of suggested changes to the existing definitions that should be considered when developing the Proposed Selwyn District Plan definitions.

The relevant definitions are displayed in the following table:

Term	Definition
<b>Township Volume</b>	
Amenity Values	Has the same meaning as defined in section 2 of the Act.
Contaminated Land	Includes any land which contains hazardous substances at concentrations above recognised guidelines which pose or are likely to pose an immediate or long term risk to human health and/or the environment.
Disposal	Includes any activity associated with the permanent discarding of material which is spent, worthless or in excess... For the purposes of the land use rules for waste generation, storage and disposal [Rules 9.1 – 9.3 and 21.1 – 21.3], disposal does not include: the deposition of inert fill on to land from another site, for the purposes of landscaping, levelling or recontouring land, filling holes or depressions, preparing building sites or other construction work.
Earthworks	Include any disturbance to, or excavation, removal or deposition of, soil, earth, or any other mineral derived from the ground.
Green Waste	Includes any compostable vegetative material, including but not limited to: weeds and garden waste, spoiled crops and tree prunings.
Ground Level	Means the level of the ground existing when works associated with any prior subdivision of the land were completed, but before filling or excavation for new building work on the land has commenced.
Landscaping	Means the visual improvement of an area through designed live planting of trees, shrubs and ground cover for amenity purposes and may include provision of physical features such as paving, art and seating. For the purposes of this definition, landscaping does not include the re-contouring of land by removing or displacement of earth or soil, or any earthworks associated with the erection or installation of a wall.
Project	For the purpose of the land use rules for earthworks, the term 'project' includes all earthworks undertaken as part of, or ancillary to, the completion of one particular activity of the construction of a building or structure, whether that activity is undertaken or the building or structure is erected continuously or in discrete stages, and whether it occurs in one continuous area or is separated by land which is not disturbed by earthworks. For example: the construction of one road or track from destination (a) to (b) is one project, as is the disturbance of soil for geological surveys over an identified area.
Solid Waste	Includes any material which is discarded as being spent, useless, worthless or in excess, and includes liquid or gaseous waste which is stored in containers.
<b>Rural Volume</b>	
Amenity Values	<i>Same as Township Volume.</i>
Clean Fill	Includes any natural material which is free of: combustible, putrescible, degradable or leachable components or materials likely to create leachate by means of biological breakdown; hazardous substances or any products or materials derived from hazardous waste treatment, stabilisation or disposal practices; contaminated soil or other contaminated materials; medical or veterinary waste; asbestos or radioactive substances. It includes (but is not limited to) soil, clay, rock, concrete and bricks.
Contaminated Land	<i>Same as Township Volume.</i>
Disposal	<i>Same as Township Volume.</i>
Earthworks	Include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of Rule 1, Earthworks, do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.
Green Waste	<i>Same as Township Volume.</i>
Ground Level	<i>Same as Township Volume.</i>

Landscaping	<i>Same as Township Volume.</i>
Municipal Solid Waste	Includes any non-hazardous solid waste from any combination of domestic, commercial and industrial sources. It includes putrescible waste, garden waste, uncontaminated biosolids and contaminated waste, which is sterilised to a standard acceptable to the Department of Health and does not contain liquids or hazardous waste, which exceeds 200ml/tonne or 200g/tonne.
Project	For the purpose of the land use rules for earthworks, the term 'project' includes all earthworks undertaken as part of, or ancillary to, the completion of one particular activity or the construction of a building or structure, whether that activity is undertaken or the building or structure is erected continuously or in discrete stages, and whether it occurs in one continuous area or is separated by land which is not disturbed by earthworks. For example: the construction of one road or track from destination (a) to (b) is one project, as is the disturbance of soil for geological surveys over an identified area.
Solid Waste	<i>Same as Township Volume.</i>

**Table 14.1 – Relevant definitions contained in the Operative Selwyn District Plan**

At the outset, it should be noted that there appears to be very few issues in relation to the wording of the current definitions. The main issue relates to the structure of the definitions and ensuring they can be easily applied by Plan users.

It is considered important that consistency is achieved in terms of the structure and content of all definitions regardless of the zones to which they apply. However, as can be seen in the table above, the existing definitions vary somewhat between the Living, Business and Rural Sections of the Plan. It is suggested that this is addressed to provide for one single definitions section that applies to all zones, and that exemptions or relevant notes are contained within the new Plan rules, rather than in the definition. This will help to ensure that Plan users do not misinterpret definitions or make errors in applying them.

Similarly, it is noted that the definition for 'earthworks' in Rural Zones includes a series of exemptions. However, ducting of fibre optic cables and drilling bores are not activities included in the exemptions, despite being specifically exempt in Chapter 1. As noted above, it is considered that exemptions should only be included within the appropriate rule so as to avoid confusion.

Section 13 of this report contains a lengthy discussion in relation to the definition of 'project' in the Plan and how that term is applied. It is considered more effective to remove the use of 'project' from the Plan and use alternative controls for earthworks activities. As an aside, it is noted that an error currently exists in the Township Volume definition of 'project'. The definition reads:

*"... the completion of one particular activity of the construction of a building or structure..." [emphasis added]*

whereas it appears that it should read:

*"... the completion of one particular activity or the construction of a building or structure..." [emphasis added]*

Consideration should also be given to terms not currently defined in the Operative Plan. It is suggested that the Proposed Plan contain additional definitions relating to:

- Excavation;
- Filling;
- Material; and
- Stockpiling.

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In conclusion, there is little change required to the wording of the existing definitions. However, a review of how the definitions in the Proposed Plan are structured should be undertaken, as well as consideration given to additional definitions to ensure further clarity around earthworks provisions.

## **15 Part Two Summary**

An analysis of all available data, including an assessment of the potential environmental effects of earthworks activities, has provided for the identification of several issues which should be addressed in formulating the Proposed Plan. Namely, the following issues should be taken into account:

- The resource consent triggers in relation to earthworks volumes should be reviewed and the control of earthworks on a 'per project' basis should be revised.
- More consideration should be given to the potential visual effects of stockpiling and how these can be controlled through permitted activity standards.
- The land remediation provisions are not suitable for the construction of storage ponds or land bunds in Rural Zones given that they require recontouring and replanting once earthworks has ceased.
- The protection of the mauri and life supporting capacity of soil is not given any consideration in the policy or rules framework of the Operative Plan. This needs to be addressed, particularly given the policy direction of the CRPS relating to the mauri of soils.
- Earthworks on contaminated land remains largely uncontrolled under the Operative Plan. At the very least, reference should be made to the NESCS within the Proposed Plan.

## PART THREE

## 16 Part Three Introduction

Part Three of this report provides recommendations in relation to the drafting of policies and rules for general earthworks in the Proposed Selwyn District Plan.

It should be noted that the recommendations below address only those matters that are within the scope of work provided by SDC and do not take into account earthworks within sensitive locations (including within Wāhi Taonga Management Areas, Outstanding Natural Landscapes and on land adjacent to waterways). Mining, mineral exploration and quarrying activities are also excluded.

Therefore, the scope of work for this report is narrowed to the extent that the matters required to be addressed relate only to general excavation and filling, and stockpiling of material on sites within Rural, Business and Living Zones not located within one of the sensitive sites listed above. The methods for controlling these activities are already well defined given that, away from waterbodies and outside of sensitive locations, the nature and associated effects of the activities are similar across the District and depend largely on the scale and intensity of the earthworks.

For the most part, the relevant issues with the Operative Plan have been identified through SWOT analysis by SDC and Part Two of this report, along with possible options for improvement. As such, it is considered more effective to recommend additions and alterations based on the identified issues and where necessary, provide draft standards that achieve the desired outcomes, rather than providing a substantial range of policy/rule options.

On that basis, the following sections provide recommendations for policies and rules in relation to the control of earthworks on sites within the scope of this enquiry.

## 17 Policy/Rule Options

The assessment of the approaches to earthworks found in other District Plans (contained in Section 9 of this report) has demonstrated that there are various 'options' associated with the earthworks topic.

For example, various activities fall under the earthworks topic, which may or may not be managed in terms of planning rules:

- Excavation;
- Filling; and
- Stockpiling.

Furthermore, various exceptions are also included in district plans rules relating to small scale or benign activities from an effects perspective. Options exist in terms of whether these exceptions are provided in the definitions or the rule itself. However, it is considered more appropriate from a planning perspective that the Proposed Plan provisions are drafted in such a manner that the range of activities described as 'exceptions' would otherwise be a permitted activity in any case.

As described in Part Two of this report, as well as in the DW012 Baseline Report for 'Hazardous Substances and Contaminated Land', the earthworks-related matters that should inform or be reflected in the planning framework of the Proposed Plan, broadly relate to the following topics:

- Amenity Values (Dust Nuisance and Visual Amenity);
- Natural Hazards (Land Instability and Flooding);

- Ecological Values;
- Cultural Values;
- Hazardous Substances and Contaminated Land; and
- Subdivision and Utilities.

The options for appropriate management of such potential effects in a district plan context are set out in the balance of this report.

## 18 Definitions

Before embarking on a discussion of the various policy and rule options it is considered pertinent to firstly consider the relevant definitions and decide on what aspects of activities that generally fall under the umbrella of “earthworks” require regulation under the Proposed Plan.

Section 14 of this report highlighted the differences and anomalies between definitions used in the Townships and Rural Volumes of the operative District Plan.

Having considered the definitions contained in the Operative Plan, and the definitions included in adjacent districts, it is recommended that the following definitions be inserted into the Proposed Plan to satisfy the terms used in the suggested activity standards below.

Term	Definition
Earthworks	means any disturbance of the land surface by the excavation, filling or stockpiling of soil, rock, earth, or any other organic matter or mineral derived from the ground. For clarity, earthworks include the deposition of clean fill.
Excavation	means the removal or disturbance of soil, rock or other material at or below the surface of the land, including in relation to land which has already been filled or excavated.
Farm track	means a vehicular track used to provide internal access throughout a rural site.
Filling	means the deposition or disturbance of soil, rock, earth, or any other organic matter upon the surface of the land above natural ground level, or upon land which has been excavated below natural ground level, or the placing or disturbance of material upon land below natural ground level where excavation has not taken place.
Landscaping	<b><i>It is important that any such definition includes the statement that it does not include the re-contouring of land by excavation or filling (i.e., earthworks).</i></b>
Sensitive Activity	means an activity undertaken in: <ol style="list-style-type: none"> <li>the area within 20m of the façade of an occupied dwelling; or</li> <li>a public amenity area, including those parts of any building and associated outdoor areas normally available for use by the general public, excluding any areas used for services or access areas; or</li> <li>a place of public assembly for recreation, education, worship, culture or deliberation purposes.</li> </ol>

**Table 18.1 – Recommended definitions to be inserted into the Proposed Plan**



## 19 Exemptions

### 19.1 Existing Selwyn District Plan Exemptions

As stated above, the Operative Plan includes exceptions within the definition of earthworks, within the introductory notes at the beginning of the earthworks rules in both Rural and Townships Volumes, lists activities that are stated as exemptions in any case as permitted activities within Rule 1.5 relating to Earthworks and Outstanding Landscape Area, and additional exemptions within the Notes at the end of the Rules section of the Rural Volume.

It is considered that the exceptions should be noted within the applicable rule framework as opposed to being included as a list of exceptions within the definition of earthworks. On that basis the suggested definition of earthworks found above does not include any such exceptions as found in the Operative Plan.

The exceptions included in the Operative Plan currently include all of the following activities:

- *Tending or Landscaping or maintenance of gardens, lawns or public spaces;*
- *Sowing, tending or cultivating crops, grazing or planting trees;*
- *Digging post holes;*
- *Burying pets;*
- *Trenching compost;*
- *Digging soak holes, building foundations and related activities, except in Wāhi Taonga Management Area C39(b);*
- *Maintaining and clearing rivers, water races or drains except in Wāhi Taonga Management Area C39(b);*
- *Maintaining or repairing existing flood protection works except in Wāhi Taonga Management Area C39(b); or*
- *Earthworks required to duct cables except in Wāhi Taonga Management Area C39(b).*
- *Drilling bores, except in Wāhi Taonga Management Area C39(a);*
- *Planting trees or removing dead or diseased trees;*
- *Cultivation;*
- *Rule 1 – Earthworks does apply to earthworks associated with harvesting forests or tracks into areas to harvest forests*
- *All earthworks within the Porters Ski and Recreation Area which comply with the rules in Appendix 25.*
- *Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.*
- *Rule 1.7.1.2 does not apply to earthworks in the area shown on the Planning Maps as the Existing Development Area for Terrace Downs, if the earthworks are for the creation of golf courses, water holding or channelling structures and building platforms. The reason for the exemption is to carry over a provision of the Terrace Downs plan change under the previous District Plan – refer to the provisions in Appendix 21.*
- *Rule 1.7.1.3 does not apply to earthworks associated with the preparation of building sites, roads or tracks or sites prepared for planting trees or other crops.*

This list is considered excessive, for the most part such activities involve a scale of earthworks that should appropriately be provided for as a permitted activity in any case. If for example, the burying of pets was being undertaken at a scale or frequency that it did trigger the earthworks rules, then it is considered that should be an activity that requires further

assessment through the resource consenting process in any case. This is also considered to be the case for trenching of compost.

Appropriate exceptions that might be required to be carried over into the Proposed Plan relate to activities that could be undertaken over a large enough area that cumulatively could exceed the permitted activity thresholds. These would include the following:

- **digging post holes;**
- **planting or removing trees (on the basis they are not otherwise protected by other provisions elsewhere in the Plan);**
- **cultivation of crops (as opposed to land cultivation/recontouring which should be subject to the earthworks rules);**

Other existing exemptions that should be carried over include:

- **Excavation for wells/bores where all necessary regional consents have been obtained, except in the Wāhi Taonga Management Area C39(a);**
- **Earthworks within the Porters Ski and Recreation Area which comply with the rules in Appendix 25;**
- **Earthworks associated with the construction and maintenance of farm tracks, however, the current ability to construct a 10m wide track is considered excessive and more akin to a road formation rather than a typical farm access track.**

## 19.2 Building Act

District Plans typically include a dispensation in relation to earthworks activity associated with building work requiring Building Consent, whether it be a building or a retaining wall.

The relevant provisions of the Building Act are included in **Appendix 3** of this report. These set out that the matters considered as part of the Building Consent include:

- loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during construction or alteration when the building is in use.
- all physical conditions likely to affect the stability of buildings, building elements and sitework.
- provision of stability for construction on the site.
- avoid the likelihood of damage to other property.
- protection of people and other property from the adverse effects of surface water.

However, not all construction requires Building Consent, so a blanket exception/exemption could result in the perverse outcome where a retaining wall less than 1.5m in height (or 3m in a Rural Zone) is subject to the District Plan Earthworks rules and a retaining wall above that height is not. On that basis consideration needs to be given to ensuring that the performance standards for earthworks integrate with Building Consent requirements. Otherwise, it is considered necessary to not exempt retaining walls beyond those associated with the construction of buildings.

Visual amenity is not a key consideration of the Building Act. On that basis the inclusion of a blanket exemption to activity that otherwise would be subject to Building Consent needs to be carefully considered in 'sensitive environments'. However, in such areas the construction of a building (that would require Building Consent) is more than likely going to trigger the need for resource consent in any case. Whilst such matters are beyond the scope of this work, it is considered that on the basis such rules are included in the Proposed Plan, then the option exists to make earthworks otherwise subject to a Building Consent exempt from the District Plan rules.

A possible exemption wording could be as follows:

***Earthworks subject to a building consent where they occur within 2.0m of the outer edge of the exterior wall. This exemption does not apply to earthworks associated with retaining walls/structures which are not required for the structural support of the principal building.***

### 19.3 Geotechnical/NESCS

Common exemptions now provided in District Plans relate to geotechnical investigations and earthworks undertaken under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

Earthworks associated with geotechnical investigations are typically temporary and the land is reinstated as soon as the investigation is complete. Whilst each individual investigative pit is small and would meet the performance standard for a permitted activity, on larger sites the number of pits required could mean that cumulatively consent would be required.

A possible exemption wording to clarify that all such investigative earthworks are permitted could be as follows:

***Any test pits or boreholes necessary as part of a geotechnical assessment or contaminated land assessment where the ground is reinstated to the same level that existed prior within 48 hours.***

As set out in more detail below, section 44A of the RMA sets out that a district plan may not duplicate or conflict with a NES. This effectively means that the Council cannot include any rules relating to contaminated land in the District Plan. On that basis an exemption to be included in the Proposed Plan could be:

***Earthworks required for the removal of contaminants regulated by the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.***

### 19.4 Utilities

It is common for District Plans to include exemptions relating to the provision of utilities, including earthworks associated with the deposition of soil from drain clearance work; the establishment, repair or replacement of a utility undertaken by the Council or a network utility operator; established and/or consented utilities; and the maintenance of existing drains or ponds, including within road reserves.

In our view such exemptions are not effects based and just because works are undertaken by the Council or a network utility operator is not a reason to not require consent. It is noted that a typical definition of 'utility' includes activities associated with the reticulation of irrigation water. This means that activities such as Central Plains Water would for the most part be permitted, regardless of the scale of the associated earthworks to construct such a scheme.

Earthworks associated with the preparation of land for residential subdivision and installation of utilities and services can be differentiated from such activity and is discussed in Section 21 of this report.

### 19.5 Exemptions Summary

The final list of appropriate exemptions to be included in the Proposed Plan can only be finalised once the appropriate thresholds/performance standards within the applicable rules are determined. As alluded to, it may be that many of the exemptions can be removed on the basis

that for the most part they will be provided for in any case. Exemptions should only provide for activity that has other positive outcomes that outweigh any adverse effects from an activity that would otherwise require consent. That balancing of factors is normally undertaken as part of the resource consent process. For that reason, the inclusion of blanket exemptions in the Proposed Plan must be carefully considered.

## 20 Policy Framework

The Operative Plan contains earthworks related objectives and policies throughout both Volumes. The ability to provide advice on the matters relating to earthworks that should inform or be reflected in policies is more complex given that at this stage the general layout of the Proposed Plan is not known. However, on the basis that a single chapter or section of the Proposed Plan is to address earthworks related matters, it is considered that the following matters be addressed.

### 20.1 Overall Objective

The current framework of the Operative Plan focusses on the management of the negative effects of earthworks. It is considered appropriate to recognise in the policy framework the fact that earthworks facilitate the subdivision, use and development of land as well as the provision of utilities and can also be used to mitigate hazards.

A similar type of objective is found in the Christchurch District Plan. Recommended wording could be as follows:

***Recognise that earthworks facilitate subdivision, use and development of land including the provision of utilities and hazard mitigation.***

### 20.2 Amenity Values

The Operative Plan Rural and Township Volume each contain a policy relating to the avoidance of dust effects from stockpiling and “construct work”/earthworks<sup>14</sup>, as well as general policies relating to the protection of amenity values.

Whilst beyond the scope of this particular work stream, it is noted that Policies B1.4.11, B1.4.20, Policy B1.4.30 and B1.4.32 specifically refer to controlling earthworks within the Port Hills, Malvern Hills, Outstanding Natural Features and Landscape Areas and the corridor along State Highway 73 and the Midland Railway within the Upper Waimakariri Basin specifically.

It is recommended that a policy addressing the visual impact, dust and other amenity related effects from earthworks be included in the Proposed Plan. Such a policy could read as follows:

***Ensure that earthworks do not result in significant visual impact, dust nuisance significant shading or other significant detracting from the amenity values enjoyed by those living or working in the vicinity.***

Consideration should also be given to a specific policy direction to provide for small-scale earthworks with temporary and less than minor adverse effects; whilst aiming to control any larger scale earthworks activities that do not meet the permitted activity standards.

A draft policy to that effect has been provided below:

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<sup>14</sup> See Policy B3.4.14 in the Township Volume and Policy B3.4.16 in the Rural Volume.

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***To provide for temporary, small-scale earthworks activities, while maintaining control over earthworks with the potential to create visual amenity and nuisance effects beyond site boundaries.***

In addition, consideration was given to the inclusion of a specific policy to guide consideration of earthworks relating to large scale water storage ponds, on the basis that applications for such an activity are likely to increase into the future. It is acknowledged that many fall under the definition of a large dam, and are therefore subject to a building consent requirement from Environment Canterbury. However, there are also potential amenity related adverse effects that require consideration by the District Council. On balance it was considered that the amenity related considerations are adequately covered by the policy recommended above and therefore a specific policy dealing with the effects of large scale water storage ponds is not required in its own right.

### **20.3 Natural Hazards**

As alluded to above, earthworks activity has the potential to both exacerbate and mitigate natural hazards. Primarily the natural hazards potentially affected by earthworks relate to land instability and flooding management.

It is acknowledged that natural hazards are a separate scope of works as part of the District Plan Review. To date no reports relating to the management of natural hazards as part of the DPR are available. On that basis the recommendations set out below will have to be checked for integration with the future work stream undertaken in relation to natural hazards.

#### **20.3.1 Land Instability**

The Operative Plan recognises that some 46% of the district's land area forms part of the high country and Port Hills with slopes generally exceeding 15%.

The Operative Plan contains general 'natural hazard' policies relating to activities and unstable land. The most directive policy relating to earthworks and unstable land is Policy B1.1.4:

*Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.*

It is considered important for the Council to maintain control over earthworks on slopes, particularly in Rural Zones, where the earthworks are not associated with projects requiring building consent (as is more often the case in Living zones). This will allow the Council to ensure land stability will not be compromised. It is recognised that many of the steeper slopes will be included in the sensitive areas that fall outside the scope of this workstream.

Notwithstanding, a general policy relating to earthworks on steep slopes and high-altitude areas is considered appropriate. A possible policy to be included in the Proposed Plan could be as follows:

***To limit earthworks on steeper slopes and at high altitudes to maintain the landscape character and reduce the likelihood of land slipping or slumping.***

#### **20.3.2 Flooding**

In terms of flooding and/or land inundation, the policies found in the Operative Plan relating to earthworks vary depending on the Volume. The Rural Volume includes a general policy:

*Policy B3.1.4*

*Ensure any earthworks undertaken in the flood areas shown on the Planning Maps do not exacerbate flooding on other property by displacing or diverting floodwater on surrounding land.*

Whilst the Township Volume includes a specific policy relating to earthworks within Tai Tapu:

*Policy B3.1.5*

*Ensure any earthworks undertaken in the Living 1A or Living 2A Zones at Tai Tapu do not divert or displace floodwater on to other people's property with adverse effects that are more than minor.*

It is considered that the general policy included in the Rural Volume is more appropriate to signal the outcomes sought by the various earthworks related provisions. However, it should include the ability to undertake limited filling in order to meet any minimum floor area requirements for new dwellings on bare land that might be included through other provisions relating to the management of natural hazards. Please note that this structure differentiates any new subdivision of land that would be subject to the requirements set out in section 106 of the RMA and any specific natural hazard avoidance policies included in the Proposed Plan.

A potential policy could be worded as:

***Except for filling required to meet minimum floor levels, ensure that filling in areas at risk of flooding does not transfer or exacerbate flooding risk to other people, property, infrastructure or the natural environment by displacing or diverting floodwater onto surrounding land.***

## 20.4 Ecological Values

Inappropriate earthworks can adversely impact on ecological values. Primarily this relates to earthworks that remove significant volumes of topsoil, within riparian margins and earthworks associated with vegetation clearance. The latter two activities are considered outside the scope of this particular topic. However, it is noted that the following objectives and policies are included in the Operative Plan to address such matters.

*Objective B1.3.6*

*Land use activities, and particularly earthworks, forestry, vegetation clearance and modification, and agricultural activities, are managed within catchments and riparian areas to protect water quantity and quality, aquatic habitat, and natural character.*

*Policy B1.3.6*

*Encourage large scale earthworks, structures or tree planting to be setback from lakes or rivers, unless the activity must be located in the riparian margin.*

*Policy B1.3.8*

*Ensure any earthworks, flood protection works, structures or trees that must be located in riparian margins, or access by stock to riparian margins:*

- *Allow legal public access along the waterbody where appropriate if such access exists, or is desirable for recreation or Mahinga Kai; and*
- *Take precautions to prevent the introduction of weeds into areas where they are not already present; and*
- *Mitigate any adverse effects on the natural character of the waterbody; and*
- *Avoid adverse effects on trout and salmon habitats.*

Notwithstanding, it is considered that such matters could be encompassed within a single earthworks related policy as follows:

***Ensure earthworks do not result in erosion, inundation or siltation, and do not have an adverse effect on surface or ground water quality***

Earthworks associated with the removal of topsoil is considered relevant to this scope of works. Existing policy B1.1.7 relates to soil damage, as follows:

*Avoid removing large quantities of topsoil from sites unless:*



- *The site will be covered in hardstanding; or*
- *The topsoil will be replaced, and the site replanted, when the activity ceases.*

It is noted that various activities such as construction of firefighting storage ponds and irrigation water storage ponds are becoming more common in the rural environment and due to their nature do not involve the replacement of topsoil. On that basis it is considered that the above policy requires some amendment to remove the use of the term 'avoid', which in planning terminology is now interpreted to being more akin to a blanket prohibition.

A potential replacement policy to address topsoil could be worded as:

***Discourage earthworks that result in the removal of topsoil from a site unless:***

- ***The site will be covered in hardstanding; or***
- ***The topsoil will be replaced, and the site reinstated on completion of the earthworks.***

## 20.5 Cultural Values

Part Two of this report has identified that the Operative Plan does not contain any policy direction that outlines the need to consider the impact of soil disturbance on the life supporting capacity or the mauri of soils when activities are proposed to occur outside culturally sensitive areas. As such, it is recommended that a policy to that effect is included in the Proposed Plan.

The policy should be drafted in line with the direction set out in both the Mahaanui Iwi Management Plan (IMP) and the Canterbury Regional Policy Statement (CRPS). These higher-order documents both aim to safeguard the mauri of Canterbury soils by managing issues such as soil contamination and land instability.

A recommended policy relating to the protection of cultural values from earthworks activities could be as follows:

***To ensure earthworks and other activities which disturb soil are undertaken in a manner which safeguards the mauri of soils.***

Consideration should also be given to the inclusion of a second policy which addresses the need to consider potential effects of earthworks activities on unknown cultural sites of significance, possible wording could be:

***To use accidental discovery protocols to mitigate the potential risk of earthworks to unknown archaeological sites.***

## 20.6 Contaminated Land

The policies contained in the Operative Plan relating to contaminated land were promulgated prior to the introduction of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) and the Listed Land Use Register (LLUR) administered by Environment Canterbury.

There is now considered to be no requirement (or need) for the Council to include detailed provisions regarding contaminated land in the District Plan. Section 30 of the RMA makes it clear that the identification and monitoring of contaminated land is a regional function, which is undertaken by way of the LLUR.

However, the District Council remains responsible for the management of adverse effects of the development, subdivision or use of contaminated land through administration of the NESCS. Section 44A of the RMA sets out that a district plan may not duplicate or conflict with a NES. This effectively means that the Council cannot include any rules relating to contaminated land in the District Plan. It is noted that the Christchurch City through its District Plan Review

included a single Objective and three related policies dealing with managing the effects of contaminated land. An advice note refers to the regulations set out in the NESCS rather than including any rules in the District Plan itself.

It is recommended that a similar approach be taken with the Proposed Plan, with reference to both Environment Canterbury's Listed Land Use Register (LLUR) and the NES for Contaminated Land with appropriate links to the relevant websites provided. This effectively provides some RMA policy basis for the standards/rules set out in the NESCS. However, that is more appropriately dealt with within the scope for Contaminated Land as opposed to being part of this Earthworks scope of works.

## 20.7 Subdivision and Utilities

Policy B4.2.5 of the Operative Plan (Township Volume) seeks to:

*To ensure any temporary adverse effects from the preparation of land for subdivision or installing utilities, are avoided, remedied or mitigated.*

This policy remains relevant inasmuch as it addresses the matter of earthworks associated with subdivision activity. However, the format of the policy simply referring to avoiding, remedying or mitigating adverse effects is not considered to reflect best practice and the policy could benefit from being more focussed. On that basis, the following amended policy wording to address earthworks associated with the subdivision of land is recommended:

***To enable temporary adverse effects from earthworks associated with the preparation of land for subdivision or installing utilities provided dust effects are appropriately managed and contaminated land identified and rehabilitated.***

## 21 Recommended Options General Earthworks Standards – Background

Part Two of this report identified issues with standards broadly relating to the following matters:

- Thresholds for earthworks activities;
- Exemptions for earthworks activities;
- Standards for subdivision;
- Standards for stockpiled material;
- Land remediation post earthworks;
- Earthworks on contaminated land;
- Earthworks and cultural values.

Taking into account the issues identified in Part Two for the topics listed above, the following sections contain matters for consideration when drafting the general earthworks standards in the Proposed Plan. Where necessary, recommended standards have been drafted along with a suggested activity status and potential matters of discretion.

As outlined in the Part Two and as used above in terms of the policy direction, the potential effects of earthworks are considered to relate to the following categories:

- Amenity Values (Dust Nuisance and Visual Amenity);
- Natural Hazards (Land Instability and Flooding);
- Ecological Values;
- Cultural Values;
- Hazardous Substances and Contaminated Land; and
- Subdivision and Utilities.



The existing structure of the Operative Plan provides the following Rule categories (in the Rural Volume at least):

- Earthworks and Road and Access Formation;
- Earthworks and Contaminated Land;
- Earthworks and Sites of Significance to Tangata Whenua;
- Earthworks and Natural Hazards;
- Earthworks and Outstanding Landscape Areas;
- Earthworks and Protected Trees;
- Earthworks and Setbacks, Volume and Site Rehabilitation;

The matters raised in the previous sections of this report are such that the option to ‘roll-over’ the existing provisions is not considered viable.

### 21.1 Earthworks and Road and Access Formation

The current Operative Plan provision (Rule 1.1.1) is as follows:

*Any earthworks for the purposes of creating or forming; a road, or access to serve any future allotment(s), shall be a discretionary activity unless the road or access forms part of an approved subdivision consent or is provided for within a designation.*

It is considered that this provision is unnecessary. Subdivision matters of discretion include the ability to provide legal and physical access to a site. Urban greenfield subdivision includes the formation of roads and is considered below in the context of subdivision and utilities. Consideration should be given to including all district roads as being designated or otherwise provided for by way of a ‘roading zone’. This would negate the need for any such provision in the Proposed Plan.

### 21.2 Earthworks and Contaminated Land

In line with the recommendations provided in Section 5.1 of the DW012 Baseline Report for Hazardous Substances and Contaminated Land, it is recommended that earthworks on contaminated land be controlled by the National Environmental Standard for Contaminated Land.

While it remains the responsibility of SDC to control any adverse effects of development, subdivision or use of contaminated land, this is now achieved through the provisions of the NESCS, which in any case, is administered by SDC. Furthermore, section 44A of the RMA requires that District Plans do not duplicate or conflict with National Environmental Standards.

On that basis, it is considered more efficient to remove the standards in relation to earthworks and contaminated land in the Operative Plan (namely, Rule 1.2 of the Rural Volume- there is no such rule in the Townships Volume) and replace them with a cross-reference to the NESCS for Contaminated Land and the Listed Land Use Register administered by Environment Canterbury. In doing so, any overlap with the NESCS would be avoided and the regulation of activities on contaminated land would be simplified.

Notwithstanding, as referred to in Section 20 above, there is merit in including a policy framework relating to activities on contaminated land.

### 21.3 Earthworks and Sites of Significance to Tangata Whenua

The Operative Plan rules (Rule 1.3 of the Rural Volume and Rules 2.16 & 2.17 of the Township Volume) provide for limited earthworks within culturally sensitive sites. It is considered that these rules are still relevant and should be included in the Proposed Plan.

As identified in Part Two, the Operative Plan does not contain any provisions that seek to control potential adverse effects on cultural values outside of Wāhi Taonga Management Areas. Although known culturally sensitive areas are identified on the planning maps and are subject to a separate set of controls, there remains potential for cultural values to be affected outside of these identified areas.

As noted in Section 20 above, the protection of cultural values from the adverse effects of earthworks activities should be promoted in the objectives and policies of the Proposed Plan. It is also recommended that a matter of discretion be inserted for restricted discretionary earthworks activities to complement the direction sought by the objectives and policies. The matter should encourage the implementation of the 'Protocols on Accidental Discovery of Archaeological Sites' and allow Council to consider the impact of any earthworks activities on the cultural values of the receiving environment.

A recommended matter of discretion in relation to earthworks and cultural values has been included in the recommended standards referred to later in this report.

#### **21.4 Earthworks and Natural Hazards**

The Operative Plan includes rules relating to flood areas, but not slope stability; although both are listed as matters to which the Council has restricted its discretion.

Whilst earthworks within such areas is likely to be considered further as part of the Natural Hazards scope of work, from an earthworks perspective there does not appear to be any impediment to the option of including the provisions set out in Rule 1.4 of the Rural Volume within the Proposed Plan.

#### **21.5 Earthworks and Outstanding Landscape Areas**

The future rule options in relation to this aspect are considered to be more appropriately dealt with by the Outstanding Landscapes scope of work.

#### **21.6 Earthworks and Protected Trees**

The future rule options in relation to this aspect are considered to be more appropriately dealt with in another scope of work.

#### **21.7 Earthworks and Setbacks, Volume and Site Rehabilitation**

These are considered to be the most influential rules within the existing Operative Plan controlling earthworks activities over the majority of the district's land area.

The issues with the existing rules have been canvassed in Part Two of this report. The overall intent of the recommended changes to the general earthworks standards is to ensure the SDC maintains an adequate level of control over all of the abovementioned potential effects that may arise from earthworks activities.

The general earthworks standards in the Operative Plan are contained over three separate chapters relating to Rural, Business and Living Zones. However, given the sensitive nature of commercial and living areas in comparison to rural and industrial areas in the district where earthworks are more common and an accepted part of the environment, there is the option to apply different earthworks rules for Rural, Industrial, Commercial and Living Zones. As such, the recommended earthworks standards for Rural and Industrial Zones are provided in Section 22, with recommendations for Commercial and Living Zones provided in Section 23 below.

The recommendations provided in this report have been formulated on the basis of context outlined above and broadly relate to the following matters:

- Thresholds for Earthworks Activities in Rural and Industrial Zones;
- Threshold for Earthworks Activities in Commercial and Living Zones;
- Preparation of Land for Subdivision; and
- Earthworks for Utilities.

## 22 Thresholds for Earthworks Activities in Rural and Industrial Zones

The Operative Plan currently contains upper-limits for permitted earthworks volumes, being 5,000m<sup>3</sup> per project for Business and Rural Zones. However, as identified in the Part Two of this report, the use of a threshold on a 'per project' basis as a trigger for resource consent can be ambiguous, resulting in inconsistencies in terms of how the rule is applied. In addition, the threshold generally acts as a 'catch-all' mechanism for any larger earthworks activities, regardless of whether that activity will result in any adverse effects.

On that basis, it is recommended that the option to use a volume-related threshold as a resource consent trigger for general earthworks is replaced by a series of alternative permitted activity performance standards that control the potential effects of earthworks within Rural and Industrial Zones. In doing so, earthworks activities would be subject to a series of parameters to ensure any potential adverse effects of earthworks are managed, while earthworks with less than minor adverse effects can be undertaken as of right. Earthworks associated with subdivision activity in all zones would be exempt from the general earthworks standards and would instead be subject to a specific set of standards, outlined in detail in Section 24 of this report.

### 22.1 Earthworks Setbacks, Area and Rehabilitation Activities in Rural Zones

Permitted Activity performance standards to control earthworks in Rural Zones have been drafted below. Various options for control are included within the proposed framework, such as the decisions around the thresholds for when consent is triggered, i.e., setbacks, heights, volumes etc. These are all highlighted in yellow.

#### 22.1.1 Exemptions

- Rules do not apply to earthworks associated with the subdivision of land<sup>15</sup>.
- Rules do not apply to earthworks associated with utilities<sup>16</sup>.

#### 22.1.2 Permitted Activity Standards

1. Earthworks in Rural Zones [for the purpose of this scope of works effectively being only the Outer and Inner Plains Areas not within a flood management area or an area of cultural significance] are a permitted activity provided the following conditions are met:
  - 1.1. Earthworks (including stockpiles) do not occur within 50m of a boundary with a site in different ownership;
  - 1.2. Earthworks do not involve the disturbance of land greater than 1,000m<sup>2</sup> in area;
  - 1.3. Earthworks do not occur on land with a slope gradient of greater than 1:3m;
  - 1.4. Earthworks do not involve a vertical cut face where more than 5% of the total vertical cut is over 3m;

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<sup>15</sup> Refer to Section 9 of this report.

<sup>16</sup> Refer to Section 10 of this report.

- 1.5. Any stockpiled material is no higher than 5m above natural ground level;
- 1.6. Any stockpiling of earth, soil or other material within 100m of any sensitive activity, other than a sensitive activity on the same property as the earthworks, is to be kept moist, vegetated or covered, or else dust suppression agents are used;
- 1.7. Earthworks are completed within 2 months of the earthworks activity commencing;
- 1.8. Any land disturbed as a result of earthworks is:
  - i. Recontoured to the same state as the surrounding land; and
  - ii. Reinstated with vegetation the same or similar species to that which existed on the site prior to the earthworks taking place, or alternatively replant with natives; except that where the site was vegetated with any plant pest, the site may be replanted with other species

no more than 12 months after the earthworks commencing, except in the case of landscaping and planting which shall be undertaken during the first planting season following the completion of the earthworks.

**Note:** Rules 1.1 and 1.8 do not apply to the following activities:

- (a) Earthworks for the creation of earth bunds less than 3m in height provided the bund is planted during the first planting season arising after the earth bund has been completed; or
- (b) Earthworks for the creation and maintenance of farm tracks less than 5m wide.

#### 22.1.3 Matters of Restricted Discretion

2. Any earthworks which do not comply with one or more of the performance standards listed above shall be a restricted discretionary activity.

The Council shall restrict its discretion to consideration of the following matters:

- 2.1. Any potential dust nuisance caused by the earthworks and any stockpiled material;
- 2.2. Any potential visual effects of the earthworks activities beyond the subject site boundary;
- 2.3. Any potential adverse effects on land stability;
- 2.4. Any other adverse effects on ecological values;
- 2.5. Any potential effects of the earthworks activities on cultural values in the receiving environment and whether any mitigation is offered, particularly in relation to the voluntary adoption of the 'Protocols on Accidental Discovery of Archaeological Sites';
- 2.6. The effectiveness of any other proposed mitigation measures; and
- 2.7. The need for monitoring and review conditions on any consent granted.

#### 22.1.4 Explanation

The above rules and associated matters of discretion have been formulated to manage the potential adverse effects of earthworks activities in Rural Zones, while ensuring earthworks that do not give rise to any adverse environmental effects can be undertaken as of right.

It is noted that Rural Zones are low-density and host numerous land-based 'business' activities, which can often result in a lower level of amenity when compared to a residential environment. As such, the rural environment generally has a greater capacity to absorb effects from earthworks activities. Furthermore, the nature of activities anticipated to occur within Rural Zones commonly require earthworks to be undertaken, including the construction of storage ponds, farm tracks, bunds and farm accessory buildings. It is on that basis, that a permissive set of activity standards have been developed.

Rule 1.1 aims to protect the amenity values of surrounding properties by ensuring earthworks activities are setback from adjoining boundaries. Earth bunds of less than 3m in height and farm tracks of less than 5m in width have been exempt given that they are regularly required to be constructed along property boundaries. Notwithstanding, they are anticipated features of the rural environment and do not have any long-standing adverse effects.

In terms of Rule 1.2, rather than including a maximum volume threshold (5,000m<sup>3</sup> in the Operative Plan), it is considered that the Council should consider the option of moving to an area based threshold. Firstly, it is considered easier to administer and secondly relates to the area of disturbed land, which is often the source of fugitive dust emissions associated with excavation and earthworks generally. It is noted that for large-scale earthworks (over an area of greater than 1,000m<sup>2</sup>) an activity will be subject to regional controls contained in the Canterbury Air Regional Plan and will be required to submit a dust management plan. This rule is consistent with this threshold.

Rules 1.3 and 1.4 seek to control earthworks on slopes where the visual effects of earthworks activities can be accentuated. Farm tracks carved into the side of hill faces are a common issue in this regard, given that they can be obtrusively visible from beyond the property boundary. The gradient of the land on which earthworks take place also has a direct bearing on land stability and the potential for excavation to result in land slumping or slipping.

Rule 1.5 relates specifically to stockpile height in order to control visual effects. There is no proposed volume limitation although this is an option. Rule 1.6 is an amended version of the existing rule for stockpiled material in Rural Zones contained within the Operative Plan and is consistent with Rule 7.36 of the Canterbury Air Regional Plan (CARP).

Rule 1.7 has been inserted to control earthworks activities which will extend over a long period where any associated effects may no longer be considered to be temporary. Typically, earthworks extending over a two-month timeframe are considered to be of a scale that requires control through a resource consent process.

Rule 1.8 aims to ensure the appropriate remediation of sites subject to earthworks activities so that any potential visual effects remain temporary. Exemptions have been made for activities where the subject site cannot practically be recontoured or replanted.

Rule 2 states that any activity not able to meet one or more of the permitted activity standards for cut, fill or stockpiling is to be assessed as a restricted discretionary activity. It is considered that the potential effects of earthworks activities in rural areas outside of sensitive locations can be adequately controlled by the matters of discretion listed under the rule.

## **22.2 Earthworks Activities in Industrial Zones**

For the most part, the Industrial Zone rules set out below for earthworks are in line with those recommended for Rural Zones. Notwithstanding, a few minor changes have been made to the recommended provisions in order to be suitable within Industrial Zones.

The most prominent earthworks activity occurring in Industrial Zones is the preparation of land for building foundations. Earthworks for building foundations is considered to be a temporary

construction effect with any land instability issues being controlled through the building consent process. On that basis such activity would remain exempt from the general earthworks standards, provided the proposed works require a Building Consent.

Activity standards for the control of earthworks activities in Industrial Zones have been drafted below:

#### **22.2.1 Permitted Activity Standards**

1. Earthworks in Industrial Zones are a permitted activity provided the following conditions are met:
  - 1.1. Earthworks (including stockpiles) do not occur within:
    - a) 100m of any sensitive activity on an adjoining site in different ownership; or
    - b) 100m of the boundary with a Living Zone;
  - 1.2. Where the earthworks involve the disturbance of greater than 1,000m<sup>2</sup> in land area, the earthworks are undertaken in accordance with a certified Construction Management Plan submitted to Selwyn District Council prior to any work being undertaken;
  - 1.3. Earthworks do not occur on land with a slope gradient of greater than 1:3m;
  - 1.4. Earthworks do not involve a vertical cut face where more than 5% of the total vertical cut is over 3m;
  - 1.5. Any stockpiled material is no higher than 5m above natural ground level;
  - 1.6. Earthworks are completed within 2 months of the earthworks activity commencing;
  - 1.7. Any land disturbed as a result of earthworks is to be:
    - i. Built upon;
    - ii. Sealed with hardstanding;
    - iii. Landscaped; and/or
    - iv. The land recontoured and replantedno more than 12 months after the earthworks commencing, except in the case of landscaping and planting which shall be undertaken during the first planting season following the completion of the earthworks.

**Note:** Rule 1.1 does not apply to the following activities:

- (a) Earthworks for the creation of earth bunds less than 3m in height provided the bund is planted during the first planting season arising after the earth bund has been completed; or

#### **22.2.2 Matters of Restricted Discretion**

2. Any earthworks which do not comply with one or more of the performance standards listed above shall be a restricted discretionary activity.

The Council shall restrict its discretion to consideration of the following matters:

- 2.1. Any potential dust nuisance caused by the earthworks and/or any stockpiled material, taking into account any proposed mitigation measures for the control of dust emissions;

- 2.2. Any potential visual effects of the earthworks activities beyond the subject site boundary;
- 2.3. Any potential adverse effects on land stability;
- 2.4. Any potential effects of the earthworks activities on cultural values in the receiving environment and whether any mitigation is offered, particularly in relation to the voluntary adoption of the 'Protocols on Accidental Discovery of Archaeological Sites';
- 2.5. The effectiveness of any other proposed mitigation measures; and
- 2.6. The need for monitoring and review conditions on any consent granted.

### 22.2.3 Explanation

It is considered that all other earthworks activities within Industrial Zones can be adequately controlled by the listed permitted activity standards in Rule 1. Rule 1.1 has been altered from the equivalent recommended condition for Rural Zones, to ensure earthworks activities are setback from adjoining sensitive activities and any Living Zone boundary. In addition, earthworks are required to be setback 100m from sensitive activities as opposed to being setback from property boundaries. This setback distance is consistent with Rule 7.36 of the CARP. The nature of the Industrial Zones is such that a lower level of amenity is anticipated, as are short-term construction effects. However, it is important to ensure any existing sensitive activities do not suffer a loss of amenity.

Rule 1.2 has been included to ensure control is maintained over large-scale earthworks that occur over sizeable areas. The standard will result in the control of substantial earthworks within the Zone through either the resource consent process or a Construction Management Plan certified by Council prior to the works being undertaken.

## 23 Threshold for Earthworks Activities in Commercial and Living Zones

It is considered appropriate to maintain an upper-limit on earthworks volumes in Living Zones and to apply the same threshold to Commercial Zones, given the sensitive nature of those environments. In contrast to Industrial and Rural Zones, there is little need to undertake large scale earthworks within Commercial and Living Zones that is not associated with subdivision or the preparation of land for building foundations. Therefore, a volume or area threshold is reasonable in these zones to allow for the management of any other larger-scale earthworks not provided for by way of the exemptions referred to above.

As such, it is considered that the maximum permitted earthworks volume should be lowered from the existing limit of 2,000m<sup>3</sup> per project to 250m<sup>3</sup> per site. As noted above, earthworks for subdivision activity and utility structures would be subject to a separate set of standards (as discussed further below).

It is considered that an earthworks volume threshold of 250m<sup>3</sup> per site will provide for a level of control that allows for small-scale earthworks with no effects, but restricts larger earthworks activities within residential and commercial areas. A limit of 250m<sup>3</sup> of earthworks in Commercial and Living Zones is more akin to the upper-limits specified in the respective district plans of the surrounding councils and is considered to be a more appropriate limit given the sensitive nature of these zones. The use of 'per site' in the zones is considered appropriate given that site boundaries are generally more easily defined in residential and commercial areas (and can be nominated by the applicant should they own multiple adjacent titles).



It is advised that any non-compliance with the proposed threshold should result in a restricted discretionary activity status and be subject to similar matters as listed above to allow the consent authority to consider the range of effects typically associated with earthworks activity.

## 24 Preparation of Land for Subdivision

It is noted that as a result of the Resource Legislation Amendment Act 2017, subdivision of land can now potentially be assessed as a permitted activity. It is considered impractical and overly restrictive for subdivision activities to be subjected to the controls for general earthworks, given the nature and scale of subdivision activities. Therefore, it is recommended that permitted activity performance standards specific to earthworks associated with the subdivision of land be included in the Proposed Plan to ensure any associated effects of permitted subdivision activities are appropriately managed.

The earthworks-related effects arising from the development of subdivisions are generally associated with amenity related temporary impacts from dust, noise as well as visual amenity. Given that these effects are temporary construction impacts that can be managed through appropriate mitigation techniques, it is recommended that they be managed through a series of permitted activity standards. Recommended standards to that effect have been drafted below. The relevant standards have been based on a set of generic conditions that have been attached to a number of resource consents (land use) granted in relation to larger residential subdivision developments in the District in recent years. Given that some subdivision activities may now be permitted, it is recommended that the conditions be implemented as permitted activity standards. It should be noted that the following standards are intended to be included as part of a suite of subdivision-related rules.

### 24.1.1 Permitted Activity Standards

1. Earthworks associated with the subdivision of land is a permitted activity provided the following conditions are met:
  - 1.1. Where earthworks result in an area of unconsolidated land greater than 1,000m<sup>2</sup> a dust management plan is to be prepared and supplied to Selwyn District Council;
  - 1.2. At the completion of all earthworks, Selwyn District Council shall be informed as to whether any earth fill has been placed on site.
  - 1.3. All filling is to be carried out in accordance with New Zealand Standard (NZS) 4431:1989 Code of Practice for Earth Fill for Residential Development;
  - 1.4. At the completion of all earthworks certificates satisfying the conditions of NZS4431: 1989 Code of Practice for Earth Fill for Residential Development, are to be provided to the Selwyn District Council. These certificates will detail the extent and nature of all earthworks undertaken;
  - 1.5. All hazardous waste sites within the subdivision shall be identified and reported to the Selwyn District Council prior to any engineering works commencing. Where a hazardous site is found at any stage of the subdivision development works then all necessary work shall be undertaken to rehabilitate the site. This may include treatment and off-site disposal.
2. Any activity which cannot comply with Rule 12 shall be a restricted discretionary activity.



#### 24.1.2 Explanation

The above drafted rules aim to control dust and contaminated land, as well as ensuring that activities are undertaken in line the NZS4431: 1989 Code of Practice for Earth Fill for Residential Development.

## 25 Earthworks for Utilities

At the outset, it is noted that the Part Two of this report did not identify any issues with the existing standards in the Operative Plan relating to earthworks in association with utilities.

In addition, it is noted that both electricity transmission activities and telecommunication facilities are subject to separate National Environmental Standards (NES) that seek to control the effects of these activities. Earthworks associated with utility structures are also subject to the regional rules, which control dust emissions.

Given that no issues have been identified with the existing rules package in the Operative Plan for utilities, and that the construction of significant utilities (namely electricity transmission lines and telecommunication facilities) are each subject to an NES, it is considered that the current rules can be effectively carried over into the Proposed Plan without any need for change.

Notwithstanding, it should be noted that no consultation has been undertaken with any utility operators in reaching the above conclusion. It is therefore recommended that consultation be undertaken with a range of utility operators in relation to earthworks for utility structures before finalising the utility rules package.

## 26 Summary of Recommendations

Based on the matters raised in previous sections of this report the option to ‘roll-over’ all of the existing earthworks provisions from the Operative Plan is not considered viable. Instead, it is considered more efficient to establish a set of permitted activity performance standards that address all of the potential adverse effects that may arise from earthworks-related activities.

The overall intent of the recommended changes to the general earthworks standards is to allow for more permissive standards in Rural and Industrial Zones, and to ensure earthworks not associated with the construction of buildings or the subdivision of land are more stringently controlled in Commercial and Living Zones.

Small-scale earthworks are generally anticipated within Rural and Industrial Zones, and the associated effects can be more readily absorbed in such receiving environments. However, it is important to ensure large-scale earthworks remain subject to the resource consent process. Conversely, Commercial and Living Zones are considered more sensitive receiving environments due to the presence of ‘sensitive’ activities. As such, earthworks which are not associated with the construction of buildings or the development of subdivisions are not commonly anticipated and potential adverse effects should be managed.

The recommendations contained in this report are broadly summarised below:

- Reconsider the listed exemptions contained in the operative Plan to ensure the majority of such activities are permitted as a result of being able to comply with the recommended performance standards, as opposed to being permitted by way of a blanket exemption. This is considered to more appropriately address the potential adverse effects of activities;

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- Carry over the majority of existing policies in the Operative Plan relating to earthworks and amenity values and insert additional policies relating to:
    - The recognition of the need for earthworks to facilitate subdivision, use and development of land, including the provision of utilities and hazard mitigation;
    - To provide for temporary and small-scale earthworks as a permitted activity;
    - To limit earthworks on steeper slopes and within flood management areas;
    - Control of the potential effects of earthworks on cultural values including the protection of the mauri of soil and use of accidental discovery protocols.
  - Remove the earthworks volume thresholds for Rural and Industrial Zones and replace them with a series of permitted activity performance standards relating primarily to setbacks and areas of disturbed soil. Various options for control are included within the proposed framework (such as the decisions around the thresholds for when consent is triggered, i.e., setbacks, heights, volumes etc) and are highlighted in yellow in Section 22. These options for control are subject to review by an Air Quality Scientist;
  - Insert additional controls for the stockpiling of material to control dust and visual amenity on adjoining sites;
  - Retain the use of volume-based threshold for the control of earthworks within residential and commercial areas, albeit at a reduced level compared to the existing volume threshold (namely in recognition of the most common types of earthworks in such zones being proposed to be covered by exemption);
  - Insert specific permitted activity standards for earthworks activities ancillary to earthworks and the provision;
  - Remove the earthworks rules relating to contaminated land and replace with references to the NES for Contaminated Land;
  - Include the consideration of cultural values and the inclusion of accidental discovery protocol as a matter of discretion for all earthworks activities requiring consent;
  - Carry over specific standards for utilities contained in the Operative Plan.

## **APPENDIX 1:**

### Selwyn District Plan: Relevant Issues, Objectives and Policies

SELWYN DISTRICT PLAN (TOWNSHIP VOLUME)		
Issues	Objectives	Policies
<p><b>Part B1.1 Land &amp; Soil</b></p> <p>The primary Earthworks issues are:</p> <p><u>Contaminated Land:</u></p> <ul style="list-style-type: none"><li>• Manage activities to avoid creating contaminated land in the first instance.</li><li>• Keep and update a register of sites, possibly contaminated from past activities, and record the information on Land Information Memoranda (a “LIM”).Control activities on contaminated land in the district plan, to avoid people being exposed to contaminants.</li></ul> <p><u>Unstable Land:</u></p> <ul style="list-style-type: none"><li>• Avoid creating unstable land in the first place by controlling large scale earthworks or earthworks on slopes.Keep and update a register of potentially unstable sites, and record that information on LIMs.</li><li>• Use powers under the Building Act 2004 to control erecting buildings and structures on unstable land.</li></ul> <p><b>Part B2.4 Waste</b></p> <p>The primary issue relevant to Earthworks is:</p> <ul style="list-style-type: none"><li>• Adverse effects on the environment from the generation and disposal of waste.</li></ul> <p><b>Part 3.1 Natural Hazards</b></p> <p>The primary issues relevant to Earthworks are:</p> <p><u>Unstable Land:</u></p> <ul style="list-style-type: none"><li>• Movement of unstable land can be caused or exacerbated by earthworks.</li></ul> <p><u>Localised Natural Hazards</u></p> <ul style="list-style-type: none"><li>• Identify areas in the District known to be affected in the past by flooding; unstable land; or seismic activity.</li><li>• Manage land use activities in these areas, to avoid or mitigate the potential adverse effects of natural hazards.</li></ul>	<p><b>Part B1.1 Land &amp; Soil</b></p> <ul style="list-style-type: none"><li>• Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised. (B1.1.1).</li></ul> <p><b>Part B2.4 Waste</b></p> <p>The primary objective relevant to the Land &amp; Soil chapter is:</p> <ul style="list-style-type: none"><li>• Adverse effects on the environment from the collection, treatment, storage or disposal of waste are reduced (B2.4.2).</li></ul> <p><b>Part B3.1 Natural Hazards</b></p> <p>The primary objective relevant to Earthworks is:</p> <ul style="list-style-type: none"><li>• Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment (B3.1.3).</li></ul>	<p><b>Part B1.1 Land &amp; Soil</b></p> <p><u>Contaminated Land</u></p> <ul style="list-style-type: none"><li>• Carry out all legal requirements to record information about possibly contaminated sites on Land Information Memoranda (B1.1.2).</li><li>• Avoid adverse effects on people’s health or well-being from exposure to contaminated soil (B1.1.3).</li></ul> <p><u>Unstable Land</u></p> <ul style="list-style-type: none"><li>• Ensure activities do not create unstable land (B1.1.5).</li></ul> <p><i>Policy B1.1.5 is to avoid creating unstable land, in the first instance... The Building Act 2004 requires building consents for the construction of dams over a certain size but not earthworks for other activities. The District Plan rules address effects of large scale earthworks on land stability that are not covered by other regulations.</i></p> <p><i>The policy and rules do not prevent large scale earthworks and earthworks on slopes. The Plan requires these activities be managed through a resource consent, to ensure sites are properly stabilised, filled and recontoured so the land is stable in the future.</i></p> <ul style="list-style-type: none"><li>• Carry out all legal requirements to record information about sites which may have unstable land, on Land Information Memoranda (B1.1.6).</li></ul> <p><b>Part B2.4 Waste</b></p> <p>The primary policies relevant to the Land &amp; Soil chapter are:</p> <ul style="list-style-type: none"><li>• Ensure that residents in Selwyn District have access to appropriate waste treatment and disposal facilities for the types of waste produced in the District, including but not limited to those facilities for disposing of hazardous substances (B2.4.2).</li><li>• Avoid treating or disposing of solid waste in townships, unless any adverse effects, including effects on amenity values are minor: and minimise adverse effects on the environment from disused waste treatment or disposal sites (B2.4.5).</li><li>• Regard any land used to treat or dispose of solid waste or to spread effluent as a potentially contaminated site, until it is tested (B2.4.7).</li><li>• Consider the taking of bonds or other mechanisms to cover any costs of managing adverse effects from sites used to treat or dispose of waste, when the site is established (B2.4.8).</li></ul> <p><b>Part B3.1 Natural Hazards</b></p> <p>The primary policies relevant Earthworks are:</p> <ul style="list-style-type: none"><li>• Ensure any earthworks undertaken in the Living 1A or Living 2A Zones at Tai Tapu do not divert or displace floodwater on to other people’s property with adverse effects that are more than minor (B3.1.5).</li></ul> <p><i>Land in the Living 1A and 2A Zones at Tai Tapu is lower than the surrounding land and is prone to flooding. Earthworks to raise the level of allotments in these zones or to create building mounds for houses, can divert floodwater on to surrounding properties. This activity can increase the level of flooding on surrounding properties.</i></p> <p><b>Part B3.4 Quality of the Environment</b></p> <p>The primary policies relevant Earthworks are:</p> <ul style="list-style-type: none"><li>• Avoid nuisance effects caused by dust from stockpiled material or construction work in Living or Business zones (B3.4.14).</li></ul>

		<ul style="list-style-type: none"><li>• Avoid, remedy or mitigate adverse effects caused by excessive or prolonged vibration associated with people’s activities (B3.4.15).</li><li>• Ensure the operating hours for non-residential activities in Living zones do not disturb surrounding residential activities, particularly at night (B3.4.16).</li></ul> <p><b>Part B4.2 Subdivision of Land</b></p> <ul style="list-style-type: none"><li>• Ensure any temporary, adverse effects from the preparation of land for subdivision or installing utilities, are avoided, remedied or mitigated (B4.2.5).</li></ul> <p><b>Part B4.3 Residential and Business Development – Town Form Policies</b></p> <ul style="list-style-type: none"><li>• Ensure any land rezoned for new residential or business development does not increase potential natural hazards from flooding (B4.3.95).</li></ul> <p><i>Relates to Tai Tapu which is prone to flooding.</i></p>
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SELWYN DISTRICT PLAN (RURAL VOLUME)		
Issues	Objectives	Policies
<p><b>Part B1.1 Land &amp; Soil</b></p> <p>The primary Earthworks issues are:</p> <ul style="list-style-type: none"><li>• Activities which contaminate, damage or erode soil.</li><li>• Effects of contaminated or unstable land on people, property, and the environment.</li></ul> <p><b>Land &amp; Soil - Strategy</b></p> <p><u>Contaminated and Unstable Land:</u></p> <ul style="list-style-type: none"><li>• Avoid creating contaminated or unstable land, in the first instance by policies and rules to manage hazardous substances, waste disposal, earthworks and forestry on slopes. (Burning on hills is controlled by the Regional Council).Policies and methods to protect people from contact with contaminated land or from building on unstable land.Encourage people to clean up contaminated sites.</li></ul> <p><u>Soil Erosion:</u></p> <ul style="list-style-type: none"><li>• Encourage work by Environment Canterbury and landowners to minimise risk of soil erosion or damage to soil structure.Manage large-scale earthworks and forestry on slopes.</li></ul> <p><b>Part B2.4 Waste</b></p> <p>The primary issue relevant to the Land &amp; Soil chapter is:</p> <ul style="list-style-type: none"><li>• Adverse effects on the environment from the generation and disposal of waste.</li></ul>	<p><b>Part B1.1 Land &amp; Soil</b></p> <ul style="list-style-type: none"><li>• Adverse effects of activities on the District’s land and soil resources are avoided, remedied or mitigated (B1.1.1).</li><li>• People and their property are not affected by contaminated soil or unstable land and any adverse effects on the environment are avoided, remedied or mitigated (B1.1.2).</li></ul> <p><b>Part B2.4 Waste</b></p> <p>The primary objective relevant to the Land &amp; Soil chapter is:</p> <ul style="list-style-type: none"><li>• Adverse effects on the environment from the collection, treatment, storage or disposal of waste are reduced (B2.4.2).</li></ul> <p><b>Part B3.1 Natural Hazards</b></p> <p>The primary objective relevant to Earthworks is:</p> <ul style="list-style-type: none"><li>• Activities do not cause or exacerbate natural hazards (3.1.1).</li></ul>	<p><b>Part B1.1 Land &amp; Soil</b></p> <p><u>Contaminated Land</u></p> <ul style="list-style-type: none"><li>• Ensure any activity involving hazardous substance or waste disposal is carried out in a way which reduces the risk of contaminating land or soil (B1.1.1).</li><li>• Avoid adverse effects on people through exposure to contaminated land and mitigate or remedy any adverse effects on the environment (B1.1.2).</li><li>• Encourage the management of contaminated sites so that effects on peoples’ health or on the environment are avoided (B1.1.3).</li></ul> <p><u>Unstable Land</u></p> <ul style="list-style-type: none"><li>• Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping (B1.1.4).</li></ul> <p><u>Soil Damage</u></p> <ul style="list-style-type: none"><li>• Encourage initiatives by Environment Canterbury and landowners to reduce the adverse effects of activities on soil structure and soil erosion (B1.1.6).</li><li>• Avoid removing large quantities of topsoil from sites unless:The site will be covered in hardstanding; or<ul style="list-style-type: none"><li>○ The topsoil will be replaced and the site replanted, when the activity ceases (B1.1.7).</li></ul></li></ul> <p><b>Part B2.4 Waste</b></p> <ul style="list-style-type: none"><li>• Require activities which create large amounts of waste to have a plan to minimise the waste produced and mitigate the environmental effects of disposing of it (B2.4.2).</li><li>• Avoid any large scale facilities for disposing of solid waste in the District, unless any adverse effects, including any cumulative effects, on the environment will be minor (B2.4.6).</li><li>• Ensure appropriate after-care of land used to dispose of waste (B2.4.8).</li></ul> <p><b>Part B3.1 Natural Hazards</b></p> <ul style="list-style-type: none"><li>• Ensure any earthworks undertaken in the flood areas shown on the Planning Maps do not exacerbate flooding on other property by displacing or diverting floodwater on surrounding land (B3.1.4).</li></ul> <p><b>Part B3.4 Quality of the Environment</b></p>

		<ul style="list-style-type: none"><li>Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material (B3.4.16)</li></ul> <p><b>Part B4.1 Subdivision</b></p> <ul style="list-style-type: none"><li>To provide for the subdivision and development of residential, commercial and visitor accommodation buildings in the Porters Ski and Recreation Area, where effects on the ecological and landscape values of the environment are managed in accordance with the following: Requiring earthworks, buildings and structures to be assessed on a project or individual basis to ensure that works and structures are responsive to the ecological and landscape values, sensitivities and features of the site and potential adverse effects on ground stability and natural hazards are avoided, remedied or mitigated (B4.1.8(e))</li></ul>
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## **APPENDIX 2:**

### Selwyn District Plan: Relevant Rules

SDC DISTRICT PLAN (TOWNSHIP VOLUME) – ASSESSMENT OF EARTHWORKS RULES		
Rule	Activity Status	Notes/Commentary
<b>C1 Living Zones – Status Activities</b>		
<b>Rule 1.1 – Status of Activities</b> The following are non-complying irrespective of whether they comply with conditions for permitted activities in Rules C2-11: (c) Disposal of any hazardous substance. (j) Processing, composting or disposal on to land of any organic matter. (This rule does not apply to the activities set out in Rule 9.3)	Non-complying	
<b>C2 Living Zones – Earthworks</b>		
<b>Note:</b> <i>Rule 2 does not apply to any of the following activities:</i> <ul style="list-style-type: none"><li>Landscaping or maintenance of gardens, lawns or public spaces;</li><li>Sowing, tending or cultivating crops, grazing or planting trees;</li><li>Digging post holes;</li><li>Burying pets;</li><li>Trenching compost;</li><li>Digging soak holes, building foundations and related activities, except in Wāhi Taonga Management Area C39(b);</li><li>Maintaining or repairing existing flood protection works except in Wāhi Taonga Management Area C39(b); or</li><li>Earthworks required to duct cables except in Wāhi Taonga Management Area C39(b).</li></ul>		
<b>Rule 2.1 – Earthworks</b> Any earthworks shall be a permitted activity if the following conditions are met:	N/A	
<b>2.1.1.1</b> Any disturbed or stockpiled material is kept moist until it has consolidated, and	Discretionary	
<b>2.1.1.2</b> Any stockpiled material is kept consolidated or covered to avoid sediment run-off from rainfall, and	Discretionary	
<b>2.1.1.3</b> Any site subject to earthworks is either: (a) built upon, (b) sealed, (c) landscaped, or (d) the land recontoured and replanted, no more than 12 months after the earthworks commencing, except in the case of landscaping and planting which shall be undertaken during the first planting season following the completion of the earthworks.	Discretionary	
<b>2.1.1.5</b> On land located within the Living 1A or 2A Zones at Tai Tapu, earthworks are limited to the forming of any accessway to a site or the preparation of any site to erect a building, provided that these earthworks do not alter or impede the land drainage pattern.	Restricted Discretionary	<i>Matters of discretion are:</i> <ul style="list-style-type: none"><li>The nature of any flooding or land instability and whether this makes the site unsuitable to undertake the proposed earthworks.</li><li>Any effects of earthworks in displacing or diverting floodwaters and increasing the potential risk of flooding elsewhere.</li><li>Any mitigation measures proposed.</li></ul>
<b>2.1.1.6</b> Except where Rule 2.1.1.5 applies, any earthworks has: (a) a volume of not more than 2,000m <sup>3</sup> per project; and (b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.	Discretionary	
<b>2.1.1.7</b>		



Any earthworks undertaken on any site to be used to erect a building complies with NZS 4431 Code of Practice for Earth Fill for Residential Development.	Discretionary	
<b>C6 Living Zones – Utilities</b>		
<b>Note:</b> <i>The undergrounding or ducting of any utility is permitted subject to compliance with Rule 2 (Earthworks), except where the provisions of Rule 3 (Heritage) apply.</i>		
<b>Rule 6.1 – Utilities</b> Any utility which meets the following provisions and complies with all other relevant rules shall be a permitted activity: <i>NB: Only rules relevant to earthworks are displayed below.</i>	N/A	
<b>6.1.1.7</b> The digging of channels or ditches to convey water is limited to maintenance or minor realignment of existing drains and stock water races.	Discretionary	
<b>6.1.1.11</b> The utility does not involve the treatment or disposal of solid waste, apart from solid waste permitted in terms of Rule 9.	Non-Complying	
<b>C9 Living Zones – Waste</b>		
<b>Rule 9.1 – Waste Generation</b> Any activity, which is not a residential activity, which generates not more than 1 cubic metre of solid waste on average per week over a year, other than inert landfill, shall be a permitted activity.	Restricted Discretionary	<i>NB: As per the definition of ‘disposal’:  “For the purposes of the land use rules for waste generation, storage and disposal, disposal does not include: the deposition of inert fill on to land from another site, for the purposes of landscaping, levelling or recontouring land, filling holes or depressions, preparing building sites or other construction work.”</i>
<b>Rule 9.2 – Waste Storage</b> The storage of solid waste shall be a permitted activity if the following conditions are met:	N/A	
<b>9.2.1.1</b> Only solid waste generated as part of activities on a site is stored on the site; and	Non-Complying	
<b>9.2.1.2</b> Any solid waste stored on a site is stored in a closed, waterproof container; and	Non-Complying	
<b>9.2.1.3</b> Solid waste is only stored on-site until it is able to be collected or removed for treatment or disposal elsewhere.	Non-Complying	
<b>Rule 9.3 – Waste Disposal</b> The disposal of solid waste shall be a permitted activity if one or more of the following conditions are met:	N/A	
<b>9.3.1.1</b> The solid waste is green garden waste which is burned or composted on the site on which it is generated; or	Non-Complying	
<b>9.3.1.2</b> The solid waste is being applied as a manure, fertiliser, compost or mulch onto gardens, lawns, or soil used to grow plant or tree crops.	Non-Complying	
<b>Rule 9.4 – Other Matters</b> The following shall be non-complying activities in Living Zones:	N/A	
<b>9.4.1</b> Any facilities for the treatment or disposal of solid or liquid waste delivered or conveyed onto a site shall be a non-complying activity.	Non-Complying	
<b>9.4.2</b> Any processing, composting or disposal onto any land of any organic matter shall be a non-complying activity except as provided for in Rule 9.3.1.	Non-Complying	
<b>C10 Living Zone – Activities</b>		
<b>Rule 10.1 – Activities and Contaminated Land</b> Any activity shall be a permitted activity on any site which contains contaminated land or where past activities on that site include those listed in Appendix 10 except for the following: 10.1.1.1 Erecting any dwelling; 10.1.1.2 Educational facilities; 10.1.1.3 Outdoor recreation activities; and 10.1.1.4 Growing commercial food crops or rearing animals.	Restricted Discretionary	<i>It is noted that earthworks/excavation is not controlled under this rule.</i>
<b>Rule 10.10 – Activities and Outdoor Storage of Materials and Goods</b> The outdoor storage of any materials or goods shall be a permitted activity if the following conditions are met:	N/A	

<b>10.10.1.2</b> The outdoor storage of materials for construction, repair or landscaping work on the same site shall be limited to up to 4 months in any 12 month period.	Discretionary	
<b>10.10.1.3</b> The outdoor storage of any other goods or materials if the following conditions are met: (a) The outdoor storage space shall be screened from any road boundary of the site by a fence, wall, or vegetation of at least 1.8m in height, and (b) The outdoor storage area shall be screened from any internal boundary of the site which adjoins another site in a Living Zone or a site in a Business 1 Zone, by a fence, wall, or vegetation of at least 1.8 m in height; and (c) Any stockpile of soil, coal, sawdust, powdered fertiliser, or any other unconsolidated materials, is shall be covered or otherwise secured from being blown by the wind.	Discretionary	
<b>C11 Living Zones – Landscape Alpine Villages</b>		
<b>Rule 11.1 – Landscape Management, Alpine Villages</b> Any activity in the Arthur’s Pass and Castle Hill Alpine Villages shall be a permitted activity if the following conditions are met: <i>NB: Only rules relevant to earthworks are displayed below.</i>	N/A	
<b>11.1.1.6</b> Any area of land disturbed by earthworks shall be covered in the intended construction material or shall be landscaped and revegetated. At Arthur’s Pass, landscaping and revegetation is to be in accordance with Rules 11.1.1.17 and Rule 11.1.1.8.	Restricted Discretionary	
<b>C13 Business Zones – Status Activities</b>		
<b>13.1.7</b> The following activities shall be discretionary activities in Business 2 and 2A Zones: (a) Composting or disposal on to land of any organic matter	Discretionary	
<b>13.1.10</b> The following activities shall be non-complying activities in Business 1 and 1A Zones: (c) Manufacture and/or disposal of any hazardous substance (f) Treatment and/or disposal of solid or liquid waste delivered or conveyed onto the site	Non-Complying	
<b>13.1.11</b> The following activities shall be non-complying activities in Business 2, 2A and 2B Zones: (c) Treatment or disposal of solid or liquid waste delivered or conveyed onto the site.	Non-Complying	
<b>13.1.12</b> The following activities shall be non-complying activities in the Business 3 Zone: (d) Treatment or disposal of solid or liquid waste delivered or conveyed onto the site.	Non-Complying	
<b>C14 Business Zones – Earthworks</b>		
<b>Notes:</b> 1. Rule 14 does not apply to any of the following activities: <ul style="list-style-type: none"> <li>Landscaping or maintenance of gardens, lawns or public spaces;</li> <li>Sowing, tending or cultivating crops, grazing or planting trees;</li> <li>Digging post holes, soak holes, building foundations and related activities;</li> <li>Maintaining and clearing rivers, water races or drains;</li> <li>Maintaining or repairing existing flood protection works; or</li> <li>Earthworks required to duct cables.</li> </ul> 2. Stockpiling of material disturbed by earthworks may be affected by Rule 22.6 – Activities and Outdoor Storage of Materials and Goods.		
<b>Rule 14.1 – Earthworks</b> Any earthworks shall be a permitted activity if the following conditions are met:	N/A	
<b>14.1.1.1</b> Any disturbed or stockpiled material is kept moist until it has consolidated, and	Discretionary	
<b>14.1.1.2</b> Any stockpiled material is kept consolidated or covered to avoid sediment run-off from rainfall, and	Discretionary	

<b>14.1.1.3</b> Any site subject to earthworks is either: (a) built upon, (b) sealed, (c) landscaped, or (d) the land recontoured and replanted, no more than 12 months after the earthworks commencing, except in the case of landscaping and planting which shall be undertaken during the first planting season following the completion of the earthworks.	Discretionary	
<b>14.1.1.5</b> Any earthworks has: (a) a volume of not more than 5,000m³ per project; and (b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.	Discretionary	
<b>14.1.1.6</b> Any earthworks are not for the purposes of creating or forming; a road, or access to serve any future allotment(s), unless the road or access forms part of an approved subdivision consent or is provided for within a designation.	Discretionary	
<b>14.1.1.7</b> Any earthworks undertaken on any site to be used to erect a building complies with NZS 4431 Code of Practice for Earth Fill for Residential Development.	Discretionary	
<b>14.1.1.9</b> The earthworks are associated with the formation of a rail crossing and siding within the Business 2A area subject to the Outline Development Plan in Appendix 43.	Discretionary	
<b>C21 Business Zones – Waste</b>		
<b>Rule 21.1 – Waste Generation</b> Any activity, which is not a residential activity, which generates not more than 1 cubic metre of solid waste on average per week over a year, other than inert landfill, shall be a permitted activity.	Restricted Discretionary	<i>NB: As per the definition of ‘disposal’:  “For the purposes of the land use rules for waste generation, storage and disposal, disposal does not include: the deposition of inert fill on to land from another site, for the purposes of landscaping, levelling or recontouring land, filling holes or depressions, preparing building sites or other construction work.”</i>
<b>Rule 21.2 – Waste Storage</b> The storage of solid waste shall be a permitted activity if the following conditions are met:	N/A	
<b>21.2.1.1</b> Only solid waste generated as part of activities on a site is stored on the site; and	Non-Complying	
<b>21.2.1.2</b> Any solid waste stored on a site is stored in a closed, waterproof container; and	Non-Complying	
<b>21.2.1.3</b> Solid waste is only stored on-site until it is able to be collected or removed for treatment or disposal elsewhere.	Non-Complying	
<b>21.2.2</b> Any facilities for the temporary storage of solid or liquid waste delivered or conveyed onto the site shall be a discretionary activity.	Discretionary	
<b>Rule 21.3 – Waste Disposal</b> The disposal of solid waste shall be a permitted activity if one or more of the following conditions are met:	N/A	
<b>21.3.1.1</b> The solid waste is green garden waste which is composted on the site on which it is generated; or	Non-Complying	
<b>21.3.1.2</b> The solid waste is being applied as a manure, fertiliser, compost or mulch onto gardens, lawns, or soil used to grow plant or tree crops.	Non-Complying	
<b>21.3.2</b> The use of any land or the establishing of any facilities for the disposal of solid waste which does not comply with the above shall be a discretionary activity if any one of the following standards and terms is met:	N/A	
<b>21.3.2.1</b> The site is located in a Business 2, 2A, 2B or 3 Zone; and	Discretionary	<i>Non-Complying activity if it fails to meet one of the standards.</i>
<b>21.3.2.2</b> The solid waste being disposed of is clean fill only; or	Discretionary	

<b>21.3.2.3</b> The solid waste being disposed of is green waste only; or	Discretionary	
<b>21.3.2.4</b> The solid waste being disposed of is monofill from an industrial or business activity, and does not include any hazardous substance(s), offal or animal carcass.	Discretionary	
<b>C22 Business Zones – Activities</b>		
<b>Rule 22.1 – Activities and Contaminated Land</b> Any activity shall be a permitted activity on any site which contains contaminated land or where past activities on that site include those listed in Appendix 10 except for the following: 10.1.1.1 Erecting any dwelling; 10.1.1.2 Educational facilities; 10.1.1.3 Outdoor recreation activities; and 10.1.1.4 Growing commercial food crops or rearing animals.	Restricted Discretionary	<i>It is noted that earthworks/excavation is not controlled under this rule.</i>
<b>Rule 22.6 – Activities and Outdoor Storage of Materials and Goods</b> The outdoor storage of any materials or goods shall be a permitted activity if the following conditions are met: <i>NB. The following is exempt from 22.6.1.1 – 22.6.1.4:</i> <i>The storage of materials for construction, repair or landscaping work on the same site, for up to 4 months in any 12 month period.</i>	N/A	<i>Note that the exemption doesn’t apply to 22.6.1.5.</i>
<b>22.6.1.1</b> Any outdoor storage area in a Business 1 Zone shall be screened from any road boundary of the site by a fence, wall or vegetation of at least 1.8m in height; and	Discretionary	
<b>22.6.1.2</b> Any outdoor storage area in a Business 1 Zone shall be screened from any internal boundary of the site which adjoins a site in another Business 1 Zone or a site in a Living zone, by a fence, wall, or vegetation of at least 1.8m in height; and	Discretionary	
<b>22.6.1.3</b> Any outdoor storage area in a Business 2 or 3 Zone shall be screened from any road boundary or internal boundary of the site which adjoins a site in a Living or Business 1 Zone, by a fence, wall or vegetation of at least 1.8m in height.	Discretionary	
<b>22.6.1.4</b> The screening referred to in Rules 22.6.1.1 to 22.6.1.3 shall be for the full length that the storage area is visible from the road.	Discretionary	
<b>22.6.1.5</b> Unconsolidated materials such as soil, coal, sawdust, powdered fertiliser are to be covered or otherwise secured from being blown by the wind.	Discretionary	
<b>Rule 22.9.2 – Development Within the Business 2A Zone, Rolleston</b> Any outdoor storage of materials within 5m of the centreline of the existing primary shelterbelt as required by Landscape Treatment 3 in Rule 24.1.3.13 shall be a controlled activity.	Controlled	<i>Matters of control:</i> <i>Any actual or potential effects on the health of the existing primary shelterbelt and the effectiveness of any measures to mitigate any such effects.</i>
<b>C23 Business Zones – Landscape Alpine Villages</b>		
<b>Rule 23.1 – Landscape Management, Alpine Villages</b> Any activity in the Arthur’s Pass and Castle Hill Alpine Villages shall be a permitted activity if the following conditions are met: <i>NB: Only rules relevant to earthworks are displayed below.</i>	N/A	
<b>23.1.1.6</b> Any area of land disturbed by earthworks shall be covered in the intended construction material or shall be landscaped and revegetated.	Restricted Discretionary	

SDC DISTRICT PLAN (RURAL VOLUME) – ASSESSMENT OF EARTHWORKS RULES		
Rule	Activity Status	Notes/Commentary
<b>C1 Rural Rules – Earthworks</b>		
<p><b>Notes:</b></p> <p>1. Rule 1 does not apply to any of the following activities:</p> <ul style="list-style-type: none"><li>Tending or landscaping of gardens, lawns or public spaces;</li><li>Digging post holes;</li><li>Drilling bores, except in Wāhi Taonga Management Area C39(a);</li><li>Planting trees or removing dead or diseased trees;</li><li>Cultivation;</li><li>Burying Pets;</li><li>Trenching compost;</li><li>Earthworks required to duct cables except in Wāhi Taonga Management Area C39(a)</li></ul> <p>2. Rule 1 – Earthworks does apply to earthworks associated with harvesting forests or tracks into areas to harvest forests.</p>		
<p><b>Rule 1.1 – Earthworks and Road and Access Formation</b></p> <p>Any earthworks for the purposes of creating or forming; a road, or access to serve any future allotment(s), shall be a discretionary activity unless the road or access forms part of an approved subdivision consent or is provided for within a designation.</p>	Discretionary	
<p><b>Rule 1.2 – Earthworks and Contaminated Land</b></p> <p>Any earthworks which meet the following condition shall be a permitted activity:</p> <p>Any soil or earth to be removed from the site is not contaminated.</p>	Permitted	
<p><b>1.2.2</b></p> <p>The removal of contaminated soil or earth from a site shall be a restricted discretionary activity.</p>	Restricted Discretionary	
<p><b>Rule 1.4 – Earthworks and Natural Hazards – Flood Areas</b></p> <p>The following earthworks undertaken in an area shown on the Planning Maps as a flood area shall be a permitted activity:</p>	N/A	
<p><b>1.4.1.1</b></p> <p>The forming of vehicular accessways through or within properties and the forming of building platforms, provided that the existing land drainage patterns are not altered or impeded; or</p>	Restricted Discretionary	<p><i>Matters of discretion are:</i></p> <ul style="list-style-type: none"><li><i>The potential effects of the earthworks on creating or exacerbating flooding on the site;</i></li><li><i>The potential effects of the earthworks on creating or exacerbating flooding on other properties, by diverting floodwaters or by increasing the level of floodwater on lower lying properties;</i></li><li><i>Any positive effects which may offset any adverse effects</i></li></ul>
<p><b>1.4.1.2</b></p> <p>Any other earthworks which do not raise the mean average level of the land subject to the earthworks or reduce the storage capacity of surface water ponding areas.</p>	Restricted Discretionary	
<p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p>	N/A	
<p><b>1.7.1.2</b></p> <p>The earthworks do not exceed:</p> <p>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</p> <p>(b) A maximum volume of 5000m3 per project.</p> <p><b>Notes</b></p> <p>1. Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.</p> <p>2. Rule 1.7.1.2 does not apply to earthworks in the area shown on the Planning Maps as the Existing Development Area for Terrace Downs, if the earthworks are for the creation of golf courses, water holding or channelling structures and building platforms.</p>	Discretionary	
<p><b>1.7.1.3</b></p> <p>When the earthworks cease, the site is:</p> <p>(a) Filled and recontoured to the same state as the surrounding land; and</p> <p>(b) Replanted with vegetation which is the same as, or of similar species to, that which existed on the site prior to the earthworks taking place, except that where the site was vegetated with any plant pest, the site may be replanted with other species.</p>	Discretionary	

<b>Note</b> <i>Does not apply to earthworks associated with the preparation of building sites, roads or tracks or sites prepared for planting trees or other crops.</i>		
<b>1.7.1.4</b> Any stockpiling of earth, soil or other material within 100m of any dwelling, other than a dwelling erected on the same property as the earthworks, is to be kept moist and consolidated.	Restricted Discretionary	
<b>1.7.1.5</b> In any area within 300m of either side of SH 73 (between Porters Pass and Arthurs Pass) or the Midland Railway (from the Waimakariri Gorge to Arthurs Pass) any earthworks are limited to: (a) The maintenance and repair of existing tracks and roads; (b) Post holes; (c) The installation of underground telecommunication lines and ancillary structures; or (d) Any other earthworks provided that the volume of earth disturbed, removed or deposited does not exceed 150m <sup>3</sup> per project.	Restricted Discretionary	
<b>C8 Rural Rules – Waste</b>		
<b>Notes</b> 1. Any landfill must comply with Rule 1 – Earthworks 6. Disposal of solid waste does not include the deposition of clean fill on to a site as part of preparing building sites or other construction work, landscaping, filling holes, or recontouring land, or the spreading of deep litter bedding (straw/sawdust) from intensive livestock production on land.		
<b>Rule 8.1 – Generation, Storage and Disposal of Solid Waste</b> Any activity which involves the generation, storage or disposal of solid waste shall be a permitted activity if all of the following conditions are met:	N/A	
<b>8.1.1.1</b> The activity generates not more than 3m <sup>3</sup> of solid waste per week, averaged over any calendar year; <b>Note</b> <i>Rule 8.1.1.1 does not apply to clean fill or green waste which is generated on the same property on which it is disposed of, or to livestock or crops which are grown or reared on-site.</i>	Restricted Discretionary	Any resource consent application made under this rule shall be non-notified and shall not require the written approval of affected parties.
<b>8.1.1.2</b> Any storage, sorting or redistribution of solid waste on-site: (a) Involves only solid waste generated as part of any activity occurring on the site; (b) Is stored in a closed waterproof container or is covered with a material that prevents nuisance effects from litter, odour, flies, vermin, dogs or birds; and (c) Is only stored on-site until it is able to be collected or removed for treatment or disposal elsewhere;	Discretionary	
<b>8.1.1.3</b> Any disposal of solid waste on-site: (a) Occurs only on sites where there is no public collection service available at the property boundary for the form of solid waste being disposed of; (b) Involves only solid waste generated as part of any activities occurring on the site; (c) Has a maximum volume of not more than 3m <sup>3</sup> per week, averaged over any calendar year; (d) Does not include any hazardous substance(s); (e) Is not disposed of within 45m of any property boundary; (f) Is buried at least 1 metre below the ground surface or is covered with a material to prevent nuisance effects from litter, odour, flies, vermin, dogs or birds. <b>Notes</b> <i>Rule 8.1.1.3(c) does not apply to green waste, offal or livestock which is from plants or livestock grown or reared on the same property.</i> <i>Rule 8.1.1.3(c) does not apply to clean fill which is sourced from the same property.</i> <b>Activity Status</b> Activities that do not comply with the above rule are <u>discretionary</u> if any one of the following terms are met: (a) The solid waste being disposed of is clean fill only; or (b) The solid waste being disposed of is monofill from an industrial or business activity, and does not include any hazardous substance(s). (c) The solid waste being disposed of is offal or animal carcasses in a pit located between 10 metres and 45 metres from the boundary of the site. All other activities that do not comply shall be <u>non-complying</u> activities.	Discretionary/N on-Complying	<b>NB: As per the definition of ‘disposal’:</b> <i>“For the purposes of Rule 8.1.1.3 disposal does not include: the deposition of inert fill on to land from another site, for the purposes of landscaping, levelling or recontouring land, filling holes or depressions, preparing building sites or other construction work.”</i>
<b>C9 Rural Rules – Activities</b>		
<b>Rule 9.2 – Listed Activities</b> All of the following activities shall be discretionary activities irrespective of whether they comply with all other rules in the Plan for permitted activities:	N/A	

<b>9.2.1.3</b> Any activity which involves the manufacture of fertiliser from organic material, where that material is brought on to the site;	Discretionary	
<b>Rule 9.4 – Scale of Non-Residential and Non-Rural Activities</b> Any activity which is not a rural activity or a residential activity shall be a permitted activity if the following conditions are met:	N/A	
<b>9.4.1.1</b> The maximum area of any site covered by building(s), loading, storage and waste areas used for any other activity on the site does not exceed 100m <sup>2</sup> and no more than two full-time equivalent persons are employed in undertaking any other activity on the site.	Discretionary	
<b>Rule 9.5 – Rural Based Industrial Activities</b> Any rural based industrial activity shall be a permitted activity if the following conditions are met:		
<b>9.5.1.1</b> The maximum area of any site covered by any building(s), loading, storage and waste areas used for any rural based industrial activity on the site shall be 100m <sup>2</sup> . <b>Note</b> <i>Does not apply to any temporary activity.</i> <b>Activity Status</b> <i>Any activity that does not comply with this rule shall be discretionary if the site is located within the Outer Plains, as shown on the Planning Maps.</i> <i>All other activities that do not comply shall be non-complying activities.</i>	Discretionary/N on-Complying	
<b>Rule 9.6 – Activities and Contaminated Land</b> Any activity on land which is contaminated shall be a permitted activity provided that none of the following activities are undertaken on that land: 9.6.1.1 Erecting any dwelling or undertaking residential activities; 9.6.1.2 The use of land for educational activities or erecting any educational facilities; 9.6.1.3 Outdoor recreation activities; and 9.6.1.4 Growing or rearing of food crops or livestock;	Restricted Discretionary	<i>It is noted that earthworks on contaminated land is not controlled under this rule.</i>
<b>Rule 9.19 – Activities and Dust</b> Any stockpiling activity shall be a permitted activity provided that stockpiling of any soil, coal, sawdust, powdered fertiliser or any other unconsolidated material outdoors within 100m of a dwelling (other than a dwelling on the same property as the stockpiled material), is either: 9.19.1.1 Covered; or 9.19.1.2 Consolidated; or 9.19.1.3 Otherwise secured to mitigate windblown dust on to adjoining properties.	Discretionary	

## **APPENDIX 3:**

### **Building Act 2004: Relevant Provisions**



BUILDING ACT 2004	
Section	Provision
7	<b>Sitework</b> – means work on a building site, including earthworks, preparatory to, or associated with, the construction, alteration, demolition, or removal of a building.
41(1)	Despite section 40, a building consent is not required in relation to— (c) any building work in respect of which a building consent cannot practicably be obtained in advance because the building work has to be carried out urgently— (i) for the purpose of saving or protecting life or health or preventing serious damage to property; or
42A(1)	Despite section 40, subject to the conditions set out in subsection (2) and whether or not a building consent would otherwise have been required, a building consent is not required for building work in the following categories: (a) building work described in Part 1 of Schedule 1; <i>Part 1, s20 exempts the following:</i> Building work in connection with a retaining wall that— (a) retains not more than 1.5 metres depth of ground; and (b) does not support any surcharge or any load additional to the load of that ground (for example, the load of vehicles).
42A(1)	Despite section 40, subject to the conditions set out in subsection (2) and whether or not a building consent would otherwise have been required, a building consent is not required for building work in the following categories: (c) building work described in Part 3 of Schedule 1; <i>Part 3, s41 exempts the following:</i> Building work in connection with a retaining wall in a Rural Zone if— (a) the wall retains not more than 3 metres depth of ground; and does not support any surcharge or any load additional to the load of that ground (for example, the load of vehicles). (b) the distance between the wall and any legal boundary or existing building is at least the height of the wall.
BUILDING CODE	
Section	Provision
B1.2	Sitework shall withstand the combination of loads that they are likely to experience during construction or alteration and throughout their lives.
B1.3.1	Sitework shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during construction or alteration and throughout their lives.

B1.3.1	Sitework shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during construction or alteration when the building is in use.
B1.3.3	Account shall be taken of all physical conditions likely to affect the stability of buildings, building elements and sitework, including: <i>(see list under provision)</i>
B1.3.6	Sitework, where necessary, shall be carried out to: (a) provide stability for construction on the site, and (b) avoid the likelihood of damage to other property.
B1.3.7	Any sitework and associated supports shall take account of the effects of: (a) changes in ground water level, (c) water, weather and vegetation, and (d) ground loss and slumping.
E1.2	Buildings and sitework shall be constructed in a way that protects people and other property from the adverse effects of surface water.
E.1.3.1	Except as otherwise required under the Resource Management Act 1991 for the protection of other property, surface water, resulting from an event having a 10% probability of occurring annually and which is collected or concentrated by buildings or sitework, shall be disposed of in a way that avoids the likelihood of damage or nuisance to other property.

## **APPENDIX 4:**

### Canterbury Regional Policy Statement: Relevant Provisions

CPRS Objective/Policy	Similar Selwyn District Plan Provision(s)
<b>Chapter 5 – Land-Use and Infrastructure</b>	<b>Part B3 – Health, Safety and Values</b>
<b>Policy 5.3.2</b> <i>Development conditions</i> To enable development including regionally significant infrastructure which: <ol style="list-style-type: none"> <li>Avoid or mitigate:               <ol style="list-style-type: none"> <li>natural and other hazards, or land uses that would likely result in increases in the frequency and/or severity of hazards.</li> </ol> </li> </ol>	<b>Objective B3.1.1 – Natural Hazards (RV)</b> Activities do not cause or exacerbate natural hazards
<b>Chapter 11 – Natural Hazards</b>	<b>Part B3 – Health, Safety and Values</b>
<b>Objective 11.2.2</b> Adverse effects from hazard mitigation are avoided or mitigated. <b>Policy 11.3.7</b> <i>Physical mitigation works</i> New physical works to mitigate natural hazards will be acceptable only where: <ol style="list-style-type: none"> <li>The natural hazard risk cannot reasonably be avoided.</li> </ol>	<b>Objective B3.1.3 – Natural Hazards (TV)</b> Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment.
<b>Chapter 14 Air Quality</b>	<b>Part B3 – Health, Safety and Values</b>
<b>Objective 14.2.2</b> <i>Localised adverse effects of discharges on air quality</i> Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources.	<b>Policy B3.4.14 – Quality of the Environment (TV)</b> Avoid nuisance effects caused by dust from stockpiled material or construction work in Living or Business zones. <b>Policy B3.4.16 – Quality of the Environment (RV)</b> Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.
<b>Chapter 15 – Soil</b>	<b>Part B1 – Natural Resources</b>
<b>Objective 15.2.2</b> <i>Prevention of soil erosion</i> Prevention of new significant induced soil erosion, and the reduction of significant existing induced erosion. <b>Policy 15.3.2</b> <i>Avoid and remedy significant induced soil erosion</i>	<b>Policy B1.1.5 – Land &amp; Soil (TV)</b> Ensure activities do not create unstable land. <b>Policy B1.1.4 – Land &amp; Soil (RV)</b> Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.

<p>To avoid significant new induced soil erosion resulting from the use of land and as far as practicable remedy or mitigate significant induced soil erosion where it has occurred. Particular focus is to be given to the desirability of maintaining vegetative cover on non-arable land.</p>	
<p><b>Chapter 17 – Contaminated Land</b></p>	<p><b>Part B1 – Natural Resources</b></p>
<p><b>Policy 17.3.2</b>  <i>Development of, or discharge from contaminated land</i>  In relation to actually or potentially contaminated land, where new subdivision, use or development is proposed on that land, or where there is a discharge of the contaminant from that land:  ... the actual or potential adverse effects of that contamination, or discharges from the contaminated land shall be avoided, remedied or mitigated in a manner that does not lead to further significant adverse effects.</p> <p><b>Policy 17.3.3</b>  <i>Contaminants may remain in the land</i>  Where land has been identified as being contaminated, contaminants should only be allowed to remain in the ground if discharges of contaminants beyond the site to air, water or land will not result in significant risk to human health or the environment.</p>	<p><b>Objective B1.1.1 – Contaminated Land (TV)</b>  Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised.</p> <p><b>Objective B1.1.2 – Contaminated Land (RV)</b>  People and their property are not affected by contaminated soil or unstable land and any adverse effects on the environment are avoided, remedied or mitigated.</p> <p><b>Policy B1.1.3 – Contaminated Land (TV)</b>  Avoid adverse effects on people’s health or well-being from exposure to contaminated soil.</p> <p><b>Policy B1.1.2 – Contaminated Land (RV)</b>  Avoid adverse effects on people through exposure to contaminated land and mitigate or remedy any adverse effects on the environment.</p> <p><b>Policy B1.1.3 – Contaminated Land (RV)</b>  Encourage the management of contaminated sites so that effects on peoples’ health or on the environment are avoided.</p>

## **APPENDIX 5:**

### Canterbury Land and Water Regional Plan: Relevant Provisions

CLWP Provisions	Similar Selwyn District Plan Provisions
<b>Section 3 – Objectives</b>	
<p><b>Objective 3.23</b></p> <p>Soils are healthy and productive, and human-induced erosion and contamination are minimised.</p>	<p><b>Objective B1.1.1 – Contaminated Land (TV)</b></p> <p>Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised.</p> <p><b>Objective B1.1.2 – Contaminated Land (RV)</b></p> <p>People and their property are not affected by contaminated soil or unstable land and any adverse effects on the environment are avoided, remedied or mitigated.</p>
<b>Section 4 – Policies: Discharges of Contaminants to Land or Water</b>	
<p><b>Policy 4.12</b></p> <p>There are no direct discharges to surface water bodies or groundwater of:</p> <ul style="list-style-type: none"> <li>(b) solid or hazardous waste or solid animal waste;</li> <li>(d) organic waste or leachate from storage of organic material; and</li> <li>(e) untreated industrial or trade waste.</li> </ul> <p><b>Policy 4.13</b></p> <p>For other discharges of contaminants into or onto land where it may enter water or to surface water bodies or groundwater (excluding those passive discharges to which Policy 4.26 applies), the effects of any discharge are minimised by the use of measures that:</p> <ul style="list-style-type: none"> <li>(a) first, avoid the production of the contaminant;</li> <li>(b) secondly, reuse, recovers or recycles the contaminant;</li> <li>(c) thirdly, minimise the volume or amount of the discharge.</li> </ul> <p><b>Policy 4.14</b></p> <p>Any discharge of a contaminant into or onto land where it may enter groundwater (excluding those passive discharges to which Policy 4.26 applies):</p> <ul style="list-style-type: none"> <li>(a) will not exceed the natural capacity of the soil to treat or remove the contaminant; and</li> <li>(b) will not exceed available water storage capacity of the soil; and</li> <li>(c) where meeting (a) and (b) is not practicable, the discharge will: <ul style="list-style-type: none"> <li>ii. utilise the best practicable option to ensure the size of any contaminant plume is as small as is reasonably practicable; and</li> <li>iv. not raise groundwater levels so that land drainage is impeded.</li> </ul> </li> </ul>	
<b>Section 4 – Policies: Earthworks, Land Excavation and Deposition of Material into Land Over Aquifers</b>	

<p><b>Policy 4.19</b></p> <p>The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated land is avoided or minimised by ensuring that:</p> <ul style="list-style-type: none"> <li>(a) activities are sited, designed and managed to avoid the contamination of groundwater;</li> <li>(b) existing or closed landfills and contaminated land are managed and monitored where appropriate to minimise any contamination of groundwater; and</li> <li>(c) there is sufficient thickness of undisturbed sediment in the confining layer over the Coastal Confined Aquifer System to prevent the entry of contaminants into the aquifer or an upward hydraulic gradient is present which would prevent aquifer contamination.</li> </ul>	
<p><b>Section 4 – Policies: Soil Stability</b></p>	
<p><b>Policy 4.20</b></p> <p>On erosion-prone land, any medium and large-scale earthworks, harvesting of forestry or other clearance of vegetation is undertaken in a manner which minimises the exposure of soil to erosion, controls sediment run-off and re-establishes vegetation cover as quickly as possible.</p>	<p><b>Policy B1.1.5 – Land &amp; Soil (TV)</b></p> <p>Ensure activities do not create unstable land.</p> <p><b>Policy B1.1.4 – Land &amp; Soil (RV)</b></p> <p>Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.</p>
<p><b>Section 4 – Policies: Hazardous Substances &amp; Hazardous Activities</b></p>	
<p><b>Policy 4.26</b></p> <p>Any discharges of hazardous substances from contaminated land, including existing and closed landfills, are managed to ensure that adverse effects beyond the site boundary on people’s health or safety, on human or stock water supplies, or on surface water are avoided.</p> <p><b>Policy 4.27</b></p> <p>Landfills and other waste collection or disposal sites are designed and sited to avoid the contamination of groundwater or surface water either through the direct discharge of hazardous substances to water or the leaching of contaminants into or onto land where they may enter water.</p>	<p><b>Policy B1.1.3 – Contaminated Land (TV)</b></p> <p>Avoid adverse effects on people’s health or well-being from exposure to contaminated soil.</p> <p><b>Policy B1.1.2 – Contaminated Land (RV)</b></p> <p>Avoid adverse effects on people through exposure to contaminated land and mitigate or remedy any adverse effects on the environment.</p> <p><b>Policy B1.1.3 – Contaminated Land (RV)</b></p> <p>Encourage the management of contaminated sites so that effects on peoples’ health or on the environment are avoided.</p>
<p><b>Section 4 – Policies: Natural Hazards</b></p>	
<p><b>Policy 4.97</b></p> <p>Remediation works which are necessary to enable people and communities to recover from natural hazard events</p> <ul style="list-style-type: none"> <li>(a) occur in a timely way,</li> </ul>	<p><b>Objective B3.1.3 – Natural Hazards (TV)</b></p> <p>Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment.</p> <p><b>Objective B3.1.1 – Natural Hazards (RV)</b></p>



<ul style="list-style-type: none"> <li>(b) the works are managed to minimise their duration and scale,</li> <li>(c) the works do not cause or exacerbate potential natural hazards elsewhere, and</li> <li>(d) adverse effects on the environment resulting from the works are avoided, remedied or mitigated.</li> </ul>	<p>Activities do not cause or exacerbate natural hazards</p>
<p><b>Section 5 – Region-Wide Rules: Municipal Solid Waste</b></p>	
<p><b>Rule 5.89</b></p> <p>The discharge of municipal solid waste or hazardous waste into or onto land, or into or onto land in circumstances where a contaminant may enter water and is not categorised as a prohibited activity is a discretionary activity.</p>	<p><b><u>Township Volume – Living Zones</u></b></p> <p><b>Rule 1.1 – Status of Activities</b></p> <p>The following are non-complying irrespective of whether they comply with conditions for permitted activities in Rules C2-11:</p> <ul style="list-style-type: none"> <li>(c) Disposal of any hazardous substance.</li> <li>(j) Processing, composting or disposal on to land of any organic matter. (This rule does not apply to the activities set out in Rule 9.3)</li> </ul> <p><b>Rule 9.4 – Waste</b></p> <p>The following shall be non-complying activities in Living Zones:</p> <p>9.4.1 – Any facilities for the treatment or disposal of solid or liquid waste delivered or conveyed onto a site shall be a non-complying activity.</p> <p>9.4.2 – Any processing, composting or disposal onto any land of any organic matter shall be a non-complying activity except as provided for in Rule 9.3.1.</p> <p><b><u>Township Volume – Business Zones</u></b></p> <p><b>Rule 13.1.7 – Status of Activities</b></p> <p>The following activities shall be discretionary activities in Business 2 and 2A Zones:</p> <ul style="list-style-type: none"> <li>(a) Composting or disposal on to land of any organic matter.</li> </ul> <p><b>Rule 13.1.10 – Status of Activities</b></p> <p>The following activities shall be non-complying activities in Business 1 and 1A Zones:</p> <ul style="list-style-type: none"> <li>(c) Manufacture and/or disposal of any hazardous substance.</li> <li>(f) Treatment and/or disposal of solid or liquid waste delivered or conveyed onto the site</li> </ul> <p><b>Rule 13.1.11 – Status of Activities</b></p> <p>The following activities shall be non-complying activities in Business 2, 2A and 2B Zones:</p> <ul style="list-style-type: none"> <li>(c) Treatment or disposal of solid or liquid waste delivered or conveyed onto the site.</li> </ul> <p><b>Rule 13.1.12 – Status of Activities</b></p> <p>The following activities shall be non-complying activities in the Business 3 Zone:</p> <ul style="list-style-type: none"> <li>(d) Treatment or disposal of solid or liquid waste delivered or conveyed onto the site.</li> </ul>

	<p><b>Rule 21.3 – Waste Disposal</b></p> <p>The disposal of solid waste shall be a permitted activity if one or more of the following conditions are met:</p> <p>21.3.1.1 – The solid waste is green garden waste which is composted on the site on which it is generated; or</p> <p>21.3.1.2 – The solid waste is being applied as a manure, fertiliser, compost or mulch onto gardens, lawns, or soil used to grow plant or tree crops.</p> <p><i>Non-compliance = Discretionary</i></p> <p>21.3.2 – The use of any land or the establishing of any facilities for the disposal of solid waste which does not comply with the above shall be a discretionary activity if any one of the following standards and terms is met:</p> <p>21.3.2.1 – The site is located in a Business 2, 2A,2B or 3 Zone; and</p> <p>21.3.2.2 – The solid waste being disposed of is clean fill only; or</p> <p>21.3.2.3 – The solid waste being disposed of is green waste only; or</p> <p>21.3.2.4 – The solid waste being disposed of is monofill from an industrial or business activity, and does not include any hazardous substance(s), offal or animal carcass.</p> <p><i>Non-compliance = Non-Complying</i></p> <p><b><u>Rural Volume – Rural Zones</u></b></p> <p><b>Rule 8.1 – Generation, Storage and Disposal of Solid Waste</b></p> <p>Any activity which involves the generation, storage or disposal of solid waste shall be a permitted activity if all of the following conditions are met:</p> <p>8.1.1.1 – The activity generates not more than 3m<sup>3</sup> of solid waste per week, averaged over any calendar year (NB: Does not apply to clean fill or green waste generated onsite);</p> <p>8.1.1.3 – Any disposal of solid waste on-site:</p> <ul style="list-style-type: none"> <li>(a) Occurs only on sites where there is no public collection service available at the property boundary for the form of solid waste being disposed of;</li> <li>(b) Involves only solid waste generated as part of any activities occurring on the site;</li> <li>(c) Has a maximum volume of not more than 3m<sup>3</sup> per week, averaged over any calendar year;</li> <li>(d) Does not include any hazardous substance(s);</li> <li>(e) Is not disposed of within 45m of any property boundary;</li> <li>(f) Is buried at least 1 metre below the ground surface or is covered with a material to prevent nuisance effects from litter, odour, flies, vermin, dogs or birds.</li> </ul> <p><b>Notes</b></p>
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	<p><i>Rule 8.1.1.3(c) does not apply to green waste, offal or livestock which is from plants or livestock grown or reared on the same property.</i></p> <p><i>Rule 8.1.1.3(c) does not apply to clean fill which is sourced from the same property.</i></p> <p><i>NB: As per the definition of 'disposal':</i></p> <p><i>"For the purposes of Rule 8.1.1.3 disposal does not include: the deposition of inert fill on to land from another site, for the purposes of landscaping, levelling or recontouring land, filling holes or depressions, preparing building sites or other construction work."</i></p>
<b>Section 5 – Region-Wide Rules: Vegetation Clearance and Earthworks in Erosion-Prone Areas</b>	
<p><b><i>For simplicity, Rules 5.170 – 5.171 have been summarised below:</i></b></p> <p>The rules relating to vegetation clearance and earthworks in erosion-prone areas contain a suite of measures that aim to control activities requiring earthworks within High Soil Erosion Risk areas (shown on the planning maps) and to ensure that land is stabilised.</p> <p>Rule 5.170 prescribes a number of conditions relating to the types of activities that are permitted and the way in which they should be undertaken.</p> <p>Rule 5.171 outlines that any activity that cannot comply with the conditions in Rule 5.170 is a restricted discretionary activity.</p>	<p><i>The Operative District Plan does not seek to control soil erosion from earthworks.</i></p>
<b>Section 5 – Region-Wide Rules: Earthworks Over Aquifers</b>	
<p><b><i>For simplicity, Rules 5.170 – 5.171 have been summarised below:</i></b></p> <p>The rules aim to restrict both the excavation and deposition of material over aquifers by controlling the depth, volume and intensity at which gravel is extracted and deposited.</p> <p>Specifically, for excavations of more than 100m<sup>3</sup> of material over semi-confined/unconfined aquifers more than 1m of undisturbed material must remain between the deepest part of excavation and the seasonal high water table.</p> <p>In relation to the deposition of material, the rules aim to control activities over semi-confined or unconfined aquifers where the seasonal high water table is less than 5m below the deepest point of excavation.</p>	<p><i>While the Operative Plan does not seek to control earthworks over aquifers, the Plan does contain various rules relating to permitted volumes of earthworks.</i></p>

## **APPENDIX 6:**

### Canterbury Air Regional Plan: Relevant Provisions

CARP Provisions	Similar Selwyn District Plan Provisions
<b>Section 6 – Policies: Central Policies Applying to All Activities</b>	
<p><b>Policy 6.1</b></p> <p>Discharges of contaminants into air, either individually or in combination with other discharges, do not cause:</p> <ul style="list-style-type: none"> <li>(a) Adverse effects on human health and wellbeing; or</li> <li>(b) Adverse effects on mauri and life supporting capacity of ecosystems, plants or animals; or</li> <li>(c) Significantly diminished visibility; or</li> <li>(d) Significant soiling or corrosion of structures or property.</li> </ul>	<p><b>Policy B3.4.14 – Quality of the Environment (TV)</b></p> <p>Avoid nuisance effects caused by dust from stockpiled material or construction work in Living or Business zones.</p> <p><b>Policy B3.4.16 – Quality of Environment (RV)</b></p> <p>Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.</p>
<b>Section 7 – Rules: Dust Generating Activities</b>	
<p><b>Rule 7.33</b></p> <p>The discharge of dust to air beyond the property of origin from the construction of buildings, land development activities, unsealed surfaces or unconsolidated land, is a permitted activity provided the following conditions, where applicable, are met (summarised):</p> <ol style="list-style-type: none"> <li>1. The building to be constructed is less than 3 stories in height, or a dust management plan is prepared;</li> <li>2. The area of unsealed surface or unconsolidated land is less than 1000m<sup>2</sup>, or a dust management plan is prepared;</li> <li>3. The discharge does not cause an offensive or objectionable effect beyond the boundary of the property of origin, when assessed in accordance with Schedule 2.</li> </ol> <p><i>Non-compliance with 1. and 2A. = Restricted Discretionary</i></p> <p><i>Non-compliance with 3. = Non-complying</i></p>	<p><b><u>Township Volume – Living and Business Zones</u></b></p> <p><b>Rule 2.1/14.1 – Earthworks</b></p> <p>Any earthworks shall be a permitted activity if the following conditions are met:</p> <ul style="list-style-type: none"> <li>2.1.1.1 – Any disturbed or stockpiled material is kept moist until it has consolidated, and</li> <li>2.1.1.2 – Any stockpiled material is kept consolidated or covered to avoid sediment run-off from rainfall.</li> <li>2.1.1.6 – Any earthworks has a volume of not more than 2000m<sup>3</sup> per project in Living Zones and 5000m<sup>3</sup> per project in Business Zones and a vertical cut face where no more than 5% of the total vertical cut is over 2m.</li> </ul> <p><b><u>Rural Volume – Rural Zones</u></b></p> <p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p> <ul style="list-style-type: none"> <li>1.7.1.2 – The earthworks do not exceed: <ul style="list-style-type: none"> <li>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</li> <li>(b) A maximum volume of 5000m<sup>3</sup> per project.</li> </ul> </li> </ul> <p><b>Notes</b></p> <ol style="list-style-type: none"> <li>1. Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a) does apply to forming tracks no more than 10m wide.</li> </ol>

<p><b>Rule 7.36</b></p> <p>The discharge of contaminants into air from the handling of bulk solid materials is a permitted activity provided the following conditions are met:</p> <ol style="list-style-type: none"> <li>1. The discharge of dust does not cause an offensive or objectionable effect beyond the boundary of the property of origin, when assessed in accordance with Schedule 2; and</li> <li>2. The handling occurs indoors, or where the handling occurs outdoors the rate of handling does not exceed 100t per hour; or</li> <li>3. Where handling occurs outdoors on less than 21 days per calendar year, the rate of handling does not exceed 250t per hour.</li> </ol>	
<p><b>Rule 7.37</b></p> <p>The discharge of contaminants into air from the outdoor storage of bulk solid materials is a permitted activity provided the following conditions are met:</p> <ol style="list-style-type: none"> <li>1. The discharge of dust does not cause an offensive or objectionable effect beyond the boundary of the property of origin, when assessed in accordance with Schedule 2; and</li> <li>2. The amount of material stored does not exceed 1000t when it has an average particle size of less than 3.5mm.</li> </ol>	<p><b><u>Township Volume – Living and Business Zones</u></b></p> <p><b>Rule 10.10 – Activities and Outdoor Storage in Living Zones</b></p> <p>The outdoor storage of any materials or goods shall be a permitted activity if the following conditions are met:</p> <ol style="list-style-type: none"> <li>10.10.1.2 – The outdoor storage of materials for construction, repair or landscaping work on the same site shall be limited to up to 4 months in any 12 month period.</li> <li>10.10.1.3 – The outdoor storage of any other goods or materials if the following conditions are met: <ul style="list-style-type: none"> <li>(a) The outdoor storage space shall be screened from any road boundary of the site by a fence, wall, or vegetation of at least 1.8m in height, and</li> <li>(b) The outdoor storage area shall be screened from any internal boundary of the site which adjoins another site in a Living Zone or a site in a Business 1 Zone, by a fence, wall, or vegetation of at least 1.8 m in height; and</li> <li>(c) Any stockpile of soil, coal, sawdust, powdered fertiliser, or any other unconsolidated materials, is shall be covered or otherwise secured from being blown by the wind.</li> </ul> </li> </ol> <p><b>Rule 22.6 – Activities and Outdoor Storage in Business Zones</b></p> <p>For simplicity, it is noted that the rules relating to outdoor storage in Business Zones are generally the same as the rules for Living Zones displayed above. Only very minor differences exist in relation required heights for screening of stockpiled material.</p> <p><b><u>Rural Volume – Rural Zones</u></b></p> <p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p>

	<p>1.7.1.4 – Any stockpiling of earth, soil or other material within 100m of any dwelling, other than a dwelling erected on the same property as the earthworks, is to be kept moist and consolidated.</p> <p><b>Rule 9.19 – Activities and Dust</b></p> <p>Any stockpiling activity shall be a permitted activity provided that stockpiling of any soil, coal, sawdust, powdered fertiliser or any other unconsolidated material outdoors within 100m of a dwelling (other than a dwelling on the same property as the stockpiled material), is either:</p> <p>9.19.1.1 – Covered; or</p> <p>9.19.1.2 – Consolidated; or</p> <p>9.19.1.3 – Otherwise secured to mitigate windblown dust on to adjoining properties.</p>
<b>Section 7 – Rules: Waste Management and Disposal</b>	
<p><b>Rule 7.49</b></p> <p>The discharge of contaminants into air from the disposal of cleanfill is a permitted activity provided the following conditions are met (summarised):</p> <ol style="list-style-type: none"> <li>1. The discharge of dust does not cause an offensive or objectionable effect beyond the boundary of the property of origin when assessed in accordance with Schedule 2; and</li> <li>2. If there is a discharge of dust beyond the property boundary, a dust management plan is prepared.</li> </ol>	

## **APPENDIX 7:**

### Ashburton District Plan: Relevant Provisions



ASHBURTON DISTRICT PLAN	
Ashburton District Plan Definitions	Selwyn District Plan Definitions
<p><b>Clean Fill</b> – includes any natural material which is free of: combustible, putrescible, degradable or leachable components or materials likely to create leachate by means of biological breakdown; hazardous substances or any products or materials derived from hazardous waste treatment, stabilisation or disposal practices; contaminated soil or other contaminated materials; medical or veterinary waste; asbestos or radioactive substances. It includes (but is not limited to) clay, rock, concrete and bricks.</p>	<p><b>Clean Fill</b> – <i>Identical to the definition contained in the ADP</i></p>
<p><b>Earthworks</b> – means the disturbance of land surfaces by the removal or depositing of material, excavation, filling or the formation of roads, banks or tracks, but excludes digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees, or drilling bores. Excavation for the purpose of land drainage is included within the definition of earthworks.</p>	<p><b>Earthworks</b> – include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of Rule 1, Earthworks, do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.</p>
Ashburton District Plan – Section 3: Rural Zones	Selwyn District Plan – Rural Volume
<p><b>Objective 3.6 – Extractive Activities</b> Provide for and manage the effects of extractive activities, including earthworks whilst protecting the amenity values of the rural environment and rural resources.</p> <p><b>Policy 3.6D</b> Control earthworks, including mineral extraction within the District to ensure minimal adverse effects on amenity values and land stability, whilst protecting important geoconservation sites, outstanding natural landscapes, riparian areas and areas of significant nature conservation value.</p>	<p><b>Policy B3.4.16 – Quality of Environment</b> Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.</p> <p><b>Policy B1.1.4 – Land &amp; Soil</b> Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.</p>
<p><b>Rule 3.8.2 – Permitted Activities</b> The following activities shall be Permitted Activities provided that they comply with all of the relevant Site and Zone Standards below and all relevant District-Wide Rules and, are not listed as Controlled, Discretionary or Prohibited Activities:</p> <ul style="list-style-type: none"> <li>(a) Deposition of clean fill, not including deposition of any demolition material; limited to: <ul style="list-style-type: none"> <li>i. the Rural A and B zones, and</li> <li>ii. a maximum of 200m<sup>3</sup> on any one site per annum.</li> </ul> </li> <li>(b) Earthworks.</li> </ul>	

<p><b>Rule 3.8.4 – Restricted Discretionary Activities</b></p> <p>Any Activity which is listed as a Permitted Activity and which complies with all of the relevant Zone Standards, but does not comply with any one or more of the relevant Site Standards is a restricted discretionary activity.</p> <p><i>NB There are no Zone Standards relevant to earthworks activities.</i></p>	
<p><b>Rule 3.9.13 – Earthworks</b></p> <p>(a) Earthworks in the Rural C zone shall not exceed 2000m<sup>3</sup> (volume) or 2000m<sup>2</sup> (area) in any one hectare in any continuous period of 5 years other than the repair and maintenance of operational tracks. This clause shall not apply to the Mt Hutt ski-field area.</p> <p>(b) Earthworks in the Rural A and B zones (excluding dig and fill for drainage works), shall not exceed a maximum volume of 5000m<sup>3</sup> over an area no greater than 2000m<sup>2</sup> on any one site per annum.</p> <p>Except that:</p> <p>Earthworks shall not be located on slopes with an angle greater than 20° (measured as an average slope angle over any 100m length slope), other than the repair and maintenance of operational tracks. This clause shall not apply to the Mt Hutt ski-field area.</p>	<p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p> <p>1.7.1.2</p> <p>The earthworks do not exceed:</p> <p>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</p> <p>(b) A maximum volume of 5000m<sup>3</sup> per project.</p> <p><b>Note</b></p> <p><i>Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.</i></p> <p>1.7.1.3</p> <p>When the earthworks cease, the site is:</p> <p>(a) Filled and recontoured to the same state as the surrounding land; and</p> <p>(b) Replanted with vegetation which is the same as, or of similar species to, that which existed on the site prior to the earthworks taking place, except that where the site was vegetated with any plant pest, the site may be replanted with other species.</p> <p><b>Note</b></p> <p><i>Does not apply to earthworks associated with the preparation of building sites, roads or tracks or sites prepared for planting trees or other crops.</i></p>
<p><b>Ashburton District Plan – Section 4: Residential Zones</b></p>	<p><b>Selwyn District Plan – Township Volume: Living Zones</b></p>
<p><b>Rule 4.8.4 – Discretionary Activities</b></p> <p>Any Other Activity, which is not listed as a Permitted, Restricted Discretionary or Non-Complying Activity.</p> <p><i>NB Earthworks is not a listed activity.</i></p>	<p>Any earthworks that are able to meet the conditions listed under <b>Rule 2.1</b> is a permitted activity in Living Zones. Included in Rule 2.1 is the following condition:</p> <p>2.1.1.6</p> <p>Except where Rule 2.1.1.5 applies, any earthworks has:</p> <p>(a) a volume of not more than 2,000m<sup>3</sup> per project; and</p> <p>(b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.</p>

Ashburton District Plan – Section 5: Business Zones	Selwyn District Plan – Township Volume: Business Zones
<p><b>Rule 5.8.6 – Non-Complying Activities</b></p> <p>All activities unless listed as Permitted, Controlled, Restricted Discretionary, Discretionary or Prohibited Activities are Non-Complying.</p> <p><i>NB Earthworks is not a listed activity.</i></p>	<p>Any earthworks that are able to meet the conditions listed under <b>Rule 14.1</b> is a permitted activity in Business Zones. Included in Rule 14.1 is the following condition:</p> <p>14.1.1.5</p> <p>Any earthworks has:</p> <ul style="list-style-type: none"> <li>(a) a volume of not more than 5,000m<sup>3</sup> per project; and</li> <li>(b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.</li> </ul>
Ashburton District Plan – Section 9: Subdivision	Selwyn District Plan
<p><b>Policy 9.1Q – Effects of Subdivision and Development</b></p> <p>Ensure that any measures taken in relation to the mitigation of natural hazards do not adversely affect the character and amenity values of an area, and do not cause in themselves further remediation works to be undertaken.</p>	<p><b>Objective B3.1.3 – Natural Hazards (TV)</b></p> <p>Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment.</p> <p><b>Objective B3.1.1 – Natural Hazards (RV)</b></p> <p>Activities do not cause or exacerbate natural hazards</p>
<p><b>Rule 9.7.3 – Controlled Activities</b></p> <p>Earthworks limited to a maximum volume of 5,000m<sup>3</sup> on any one site per annum. Control is reserved over the following matters:</p> <ul style="list-style-type: none"> <li>i. the location and scale of earthworks</li> <li>ii. effects on visual amenity and outlook from surrounding areas</li> <li>iii. the duration of the earthworks and hours of operation</li> <li>iv. site management i.e. control of dust and runoff</li> <li>v. whether any materials will be transported from the site and potential effects on the road network i.e. truck movements</li> <li>vi. effects on sensitive environments; including areas of significant nature conservation,</li> <li>vii. heritage, landscape, geoconservation or cultural value, or riparian areas</li> <li>viii. any relevant assessment matters.</li> </ul>	
<p><b>Rule 9.7.4 – Restricted Discretionary Activities</b></p> <p>Earthworks greater than 5,000m<sup>3</sup> on any one site per annum, in the Open Space Zones, Business Zones or for utilities. Council has restricted its discretion to the matters listed under Controlled Activities above.</p>	

<p><b>Rule 9.7.5 – Discretionary Activities</b></p> <p>Any Activity which is listed as a Controlled or Restricted Discretionary Activity, which does not comply with any of the General Standards shall be a Discretionary Activity.</p>	
<p><b>Rule 9.8.5 – Earthworks</b></p> <ul style="list-style-type: none"> <li>(b) Earthworks in the Residential Zones shall not exceed 5,000m<sup>3</sup> per subdivision.</li> <li>(c) No earthworks shall create a new ground level more than 150mm above or below the existing ground level at the property boundary.</li> </ul> <p><b>Note:</b></p> <p><i>For the purposes of this rule, earthworks provisions do not apply to any earthworks associated with digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees, or drilling bores.</i></p>	

## **APPENDIX 8:**

### Waimakariri District Plan: Relevant Provisions

WAIMAKARIRI DISTRICT PLAN	
Waimakariri District Plan Definitions	Selwyn District Plan Definitions
<b>Clean Fill</b> – <i>Undefined</i>	<b>Clean Fill</b> – includes any natural material which is free of: combustible, putrescible, degradable or leachable components or materials likely to create leachate by means of biological breakdown; hazardous substances or any products or materials derived from hazardous waste treatment, stabilisation or disposal practices; contaminated soil or other contaminated materials; medical or veterinary waste; asbestos or radioactive substances. It includes (but is not limited to) soil, clay, rock, concrete and bricks.
<b>Earthworks</b> – means the disturbance of land by excavating, placing or replacing soil or other material, and includes driveway and access construction, and land drainage works, but excludes earthworks involving: — cultivation for, or harvesting of agricultural and horticultural crops; — domestic gardening; — digging of postholes for the construction of fences; — works for research and monitoring such as coring, water bores and use of piezometers; — maintenance and enhancement of any wetland; or — ripping in of water pipes.	<b>Earthworks</b> – include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of Rule 1, Earthworks, do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.
<b>Significant Earthworks</b> – means the disturbance of land by excavating soil or other material to a depth of greater than 35 centimetres and: (a) removing or redistributing soil or other material of more than 7.5 cubic metres; or (b) disturbing more than an area of 50 square metres.	
Waimakariri District Plan – Chapter 8: Natural Hazards	Selwyn District Plan – Health, Safety and Values
<b>Policy 8.2.1.4</b> Avoid, remedy, or mitigate the adverse effects of activities that impede or redirect the movement of floodwater on a site, and/or exacerbate flood risk.	<b>Objective B3.1.3 – Natural Hazards (TV)</b> Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment.  <b>Objective B3.1.1 – Natural Hazards (RV)</b> Activities do not cause or exacerbate natural hazards
Waimakariri District Plan – Chapter 12: Health, Safety and Well-Being	Selwyn District Plan – Health, Safety and Values
<b>Objective 12.1.3 – Air</b> Protect people, vegetation, animals, and other natural and physical resources, from the adverse effects resulting from the discharge of contaminants to air.	<b>Policy B3.4.14 – Quality of the Environment (TV)</b> Avoid nuisance effects caused by dust from stockpiled material or construction work in Living or Business zones.  <b>Policy B3.4.16 – Quality of the Environment (RV)</b> Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.

Waimakariri District Plan – Chapter 23: Land and Water Margins – Rules	Selwyn District Plan – Township Volume: Living Zones
<p><b>Rule 23.1 – Permitted Activities</b></p> <p>Any land use is a permitted activity if it:</p> <ul style="list-style-type: none"> <li>i. is not otherwise listed as a controlled, discretionary (restricted), discretionary or non-complying activity under this chapter, or is not a discretionary activity (restricted) under Rule 25.2.4;</li> <li>ii. complies with the conditions under Rule 23.1.1; and</li> <li>iii. complies with all the conditions and provisions for permitted activities in all chapters.</li> </ul>	<p><b>Rule 10.10 – Activities and Outdoor Storage of Materials and Goods (TV)</b></p> <p>The outdoor storage of any materials or goods shall be a permitted activity if the following conditions are met:</p> <p>10.10.1.2 – The outdoor storage of materials for construction, repair or landscaping work on the same site shall be limited to up to 4 months in any 12 month period.</p> <p>10.10.1.3 – The outdoor storage of any other goods or materials if the following conditions are met:</p> <ul style="list-style-type: none"> <li>(a) The outdoor storage space shall be screened from any road boundary of the site by a fence, wall, or vegetation of at least 1.8m in height, and</li> <li>(b) The outdoor storage area shall be screened from any internal boundary of the site which adjoins another site in a Living Zone or a site in a Business 1 Zone, by a fence, wall, or vegetation of at least 1.8 m in height; and</li> <li>(c) Any stockpile of soil, coal, sawdust, powdered fertiliser, or any other unconsolidated materials, is shall be covered or otherwise secured from being blown by the wind.</li> </ul>
<p><b>Rule 23.1.1 – Conditions</b></p> <p>23.1.1.1 – Stockpiling of soil over vegetation shall not cover more than 1000m<sup>2</sup> at any one time on any one site.</p> <p>23.1.1.7 – Earthworks, including the extraction of minerals, in any Residential Zone or Business Zone, shall not involve the extraction or redistribution of more than 300m<sup>3</sup>, per 1000m<sup>2</sup>, of soil and/or rock on any one site.</p> <p>23.1.1.8 – Earthworks, including the extraction of minerals, in the Rural Zones, other than in the bed of any river, shall not involve the disturbance of more than 1000m<sup>2</sup> of soil and/or rock per any 1ha.</p> <p><i>Non-compliance = Restricted Discretionary</i></p>	<p><b>Rule 9.19 – Activities and Dust (RV)</b></p> <p>Any stockpiling activity shall be a permitted activity provided that stockpiling of any soil, coal, sawdust, powdered fertiliser or any other unconsolidated material outdoors within 100m of a dwelling (other than a dwelling on the same property as the stockpiled material), is either:</p> <ul style="list-style-type: none"> <li>i. Covered; or</li> <li>ii. Consolidated; or</li> <li>iii. Otherwise secured to mitigate windblown dust on to adjoining properties.</li> </ul> <p><b>Rule 2.1 – Earthworks and Setbacks, Volume and Site Rehabilitation (TV)</b></p> <p>Any earthworks that are able to meet the conditions listed under <b>Rule 2.1</b> is a permitted activity in Living Zones. Included in Rule 2.1 is the following condition:</p> <p>2.1.1.6</p> <p>Except where Rule 2.1.1.5 applies, any earthworks has:</p> <ul style="list-style-type: none"> <li>(a) a volume of not more than 2,000m<sup>3</sup> per project; and</li> <li>(b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.</li> </ul> <p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation (RV)</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p> <p>1.7.1.2 – The earthworks do not exceed:</p>

	<p>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</p> <p>(b) A maximum volume of 5000m<sup>3</sup> per project.</p> <p><b>Notes</b></p> <p><i>Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.</i></p>
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## **APPENDIX 9:**

### Hurunui District Plan: Relevant Provisions

<b>HURUNUI DISTRICT PLAN</b>	
<b>Hurunui District Plan Definitions</b>	<b>Selwyn District Plan Definitions</b>
<b>Clean Fill</b> – means an area used for the disposal of inert and non-hazardous material into or onto land.	<b>Clean Fill</b> – includes any natural material which is free of: combustible, putrescible, degradable or leachable components or materials likely to create leachate by means of biological breakdown; hazardous substances or any products or materials derived from hazardous waste treatment, stabilisation or disposal practices; contaminated soil or other contaminated materials; medical or veterinary waste; asbestos or radioactive substances. It includes (but is not limited to) soil, clay, rock, concrete and bricks.
<b>Earthworks</b> – means the disturbance of land by excavating, placing or replacing soil or other material (other than waste), and includes driveway and access construction and the extraction of gravel for this purpose, but excludes cultivation of land and the clearance of slips.	<b>Earthworks</b> – include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of Rule 1, Earthworks, do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.
<b>Hurunui District Plan – Chapter 1: Non-Renewable Resources</b>	<b>Selwyn District Plan – Health, Safety and Values</b>
<b>Policy 1.2</b> To manage the adverse effects of subdivision and land use activities in order to maintain and enhance the life supporting capacity of the District’s soils and to avoid or mitigate soil degradation, erosion or contamination	<b>Objective B1.1.1 – Land &amp; Soil (TV)</b> Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised.  <b>Policy B1.1.4 – Land &amp; Soil (TV)</b> Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.  <b>Objective B1.1.2 – Land &amp; Soil (RV)</b> People and their property are not affected by contaminated soil or unstable land and any adverse effects on the environment are avoided, remedied or mitigated.
<b>Policy 1.6</b> Avoid or mitigate, through advocating responsible land use practices, the contamination, degradation and erosion of soil from land disturbance or vegetation removal.	
<b>Policy 1.7</b> To provide for the extraction of land resources in a manner which avoids or mitigates any adverse environmental effects.	
<b>Policy 1.8</b> To require the rehabilitation of sites where extraction of land resources has occurred.	
<b>Hurunui District Plan – Chapter 10: Environmental Quality</b>	<b>Selwyn District Plan – Health, Safety and Values</b>

<p><b>Policy 10.5</b></p> <p>To avoid, remedy or mitigate the adverse effects of activities on amenity values.</p>	<p><b>Policy B3.4.14 – Quality of the Environment (TV)</b></p> <p>Avoid nuisance effects caused by dust from stockpiled material or construction work in Living or Business zones.</p> <p><b>Policy B3.4.16 – Quality of the Environment (RV)</b></p> <p>Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.</p>
<p><b>Policy 10.10</b></p> <p>To ensure that air quality within the District is maintained or enhanced to protect amenities.</p>	
<p><b>Hurunui District Plan – Section A1: Environmental Amenity</b></p>	<p><b>Selwyn District Plan – Township Volume: Living Zones</b></p>
<p><b>Rule A1.2.15 – Earthworks</b></p> <p>All activities involving earthworks, shall comply with the following conditions:</p> <ul style="list-style-type: none"> <li>(a) Bulk earthworks: <ul style="list-style-type: none"> <li>(i) No bulk earthworks in excess of 100 cubic metres or exceeding 500 square metres in area shall be undertaken above 900 metres.</li> </ul> </li> <li>(c) No earthworks shall require the clearing of more than 5000m<sup>2</sup> of vegetation.</li> </ul> <p><i>Non-compliance = Discretionary</i></p>	<p><b>Rule 2.1 – Earthworks and Setbacks, Volume and Site Rehabilitation (TV)</b></p> <p>Any earthworks that are able to meet the conditions listed under <b>Rule 2.1</b> is a permitted activity in Living Zones. Included in Rule 2.1 is the following condition:</p> <p>2.1.1.6</p> <p>Except where Rule 2.1.1.5 applies, any earthworks has:</p> <ul style="list-style-type: none"> <li>(a) a volume of not more than 2,000m<sup>3</sup> per project; and</li> <li>(b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres.</li> </ul> <p><b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation (RV)</b></p> <p>Any earthworks which meet the following conditions shall be a permitted activity:</p> <p>1.7.1.2 – The earthworks do not exceed:</p> <ul style="list-style-type: none"> <li>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</li> <li>(b) A maximum volume of 5000m<sup>3</sup> per project.</li> </ul> <p><b>Notes</b></p> <p><i>Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.</i></p>

## **APPENDIX 10:**

### Christchurch District Plan: Relevant Provisions

CHRISTCHURCH DISTRICT PLAN	
Christchurch District Plan Definitions	Selwyn District Plan Definitions
<p><b>Clean Fill</b> – means material that, when buried, will have no adverse effects on people or the environment. Clean fill material includes virgin natural materials such as clay, soil and rock, and other inert materials, such as concrete or brick, that are free of:</p> <ul style="list-style-type: none"> <li>(a) combustible, putrescible, degradable or leachable components;</li> <li>(b) hazardous substances;</li> <li>(c) products or materials derived from hazardous waste treatment, hazardous waste stabilisation, or hazardous waste disposal practices;</li> <li>(d) materials that may present a risk to human or animal health, such as medical and veterinary waste, asbestos or radioactive substances; or</li> <li>(e) liquid waste.</li> </ul>	<p><b>Clean Fill</b> – includes any natural material which is free of: combustible, putrescible, degradable or leachable components or materials likely to create leachate by means of biological breakdown; hazardous substances or any products or materials derived from hazardous waste treatment, stabilisation or disposal practices; contaminated soil or other contaminated materials; medical or veterinary waste; asbestos or radioactive substances. It includes (but is not limited to) soil, clay, rock, concrete and bricks.</p>
<p><b>Disturbance of Soil</b> – means any activity, including excavation and filling, which results in soil being shifted, moved, mixed, turned or disturbed.</p>	
<p><b>Earthworks</b> – means any filling, excavation, disturbance of, deposition on or change to the profile of, the land of a site by:</p> <ul style="list-style-type: none"> <li>(a) moving, removing, placing or replacing earth, rock or soil; or</li> <li>(b) root raking and blading; or</li> <li>(c) inserting cement, bentonite grout, timber or other foundation piles and/or undertaking other methods, either for earthquake repair or to strengthen the land to allow for construction of a building on the site; or</li> <li>(d) constructing a track, firebreak or landing; or</li> <li>(e) installing services or utilities.</li> </ul>	<p><b>Earthworks</b> – include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of Rule 1, Earthworks, do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.</p>
<p><b>Excavation</b> – means the removal or disturbance of soil or material at or below the surface of the land, including in relation to land which has already been filled or excavated.</p>	
<p><b>Filling</b> - means the placing or disturbance of material upon the surface of the land above natural ground level, or upon land which has been excavated below natural ground level, or the placing or disturbance of material upon land below natural ground level where excavation has not taken place.</p>	
<p><b>Ground Level</b> - means the natural ground level or, where the land has been subdivided, the level of the ground existing when works associated with any prior subdivision of the land were completed, but before filling or excavation for new buildings on the land has commenced.</p>	<p><b>Ground Level</b> – means the level of the ground existing when works associated with any prior subdivision of the land were completed, but before filling or excavation for new building work on the land has commenced.</p>

Christchurch District Plan – Chapter 4: Hazardous Substances and Contaminated Land	Selwyn District Plan
<p><b>Objective 4.2.2.1 – Contaminated Land: Managing Effects</b></p> <p>Land containing elevated levels of contaminants is managed to protect human health and the environment, which includes significant natural and Ngāi Tahu cultural values from the adverse effects of subdivision, development and use of contaminated land and natural hazards, including from site investigations, earthworks and soil disturbance, and to enable the land to be used in the future.</p>	<p><b>Objective B.1.1.1 – Land &amp; Soil (TV)</b></p> <p>Adverse effects on people, and their activities, ecosystems and land and soil resources from contaminated soil or unstable land, are minimised.</p> <p><b>Policy B1.1.3 – Land &amp; Soil (TV)</b></p> <p>Avoid adverse effects on people’s health or well-being from exposure to contaminated soil.</p>
Christchurch District Plan – Chapter 5: Natural Hazards	Selwyn District Plan
<p><b>Policy 5.2.2.1.4 – No Transferring of Natural Hazard Risk</b></p> <p>Ensure that subdivision, use and development (including proposals for hazard mitigation works or hazard removal) do not transfer or create unacceptable natural hazard risk to other people, property, infrastructure or the natural environment.</p>	<p><b>Objective B3.1.3 – Natural Hazards (TV)</b></p> <p>Ensure methods to mitigate natural hazards do not create or exacerbate adverse effects on other people or the environment.</p> <p><b>Objective B3.1.1 – Natural Hazards (RV)</b></p> <p>Activities do not cause or exacerbate natural hazards</p>
<p><b>Policy 5.2.2.2.1 – Flooding</b></p> <p>(e) Except for filling required to meet minimum floor levels, ensure that filling in urban areas at risk of flooding in a major flood event does not transfer flooding risk to other people, property, infrastructure or the natural environment.</p>	<p><b>Policy B3.1.5 – Natural Hazards (TV)</b></p> <p>Ensure any earthworks undertaken in the Living 1A or Living 2A Zones at Tai Tapu do not divert or displace floodwater on to other people’s property with adverse effects that are more than minor.</p> <p><i>Land in the Living 1A and 2A Zones at Tai Tapu is lower than the surrounding land and is prone to flooding. Earthworks to raise the level of allotments in these zones or to create building mounds for houses, can divert floodwater on to surrounding properties. This activity can increase the level of flooding on surrounding properties.</i></p>
<p><b>Rule 5.4.1.1 – Activities and Earthworks in the Flood Management Area: Permitted Activities</b></p> <p>The following are permitted activities in Flood Management Zones:</p> <p>P10 – Filling or excavation for residential building platforms only to the extent necessary to achieve the minimum floor levels.</p> <p>P11 – Filling or excavation associated with the maintenance of flood protection and bank erosion protection works; and the maintenance of existing drains or ponds.</p> <p>P12 – Filling or excavation associated with utilities, or the replacement, repair or maintenance of existing utilities.</p> <p>P13 – Filling or excavation in zones other than commercial, industrial and rural zones that is not provided for above, provided the activity meets the following conditions:</p> <p>(a) A maximum height of 0.3m of filling above ground level and 0.6m depth of excavation below ground level; and</p>	<p><b>Rule 2.1.1.5 – Earthworks (TV)</b></p> <p>On land located within the Living 1A or 2A Zones at Tai Tapu, earthworks are limited to the forming of any accessway to a site or the preparation of any site to erect a building, provided that these earthworks do not alter or impede the land drainage pattern.</p>

<p>(b) A maximum volume of filling above ground level of 10m<sup>3</sup> per site, and a maximum cumulative volume of filling and excavation of 25m<sup>3</sup> per site, in each case within any continuous period of 10 years; Or</p> <p>(c) The excavation and filling is associated with the maintenance and/or replacement of underground petroleum storage systems and where, following reinstatement of the underground petroleum storage systems, the site will have a finished contour that is equivalent to the ground level at the commencement of the works.</p> <p>P14 – Filling or excavation in commercial and industrial zones that is not provided for above, provided the activity meets the following conditions:</p> <p>(a) A maximum height of 0.3m of filling above ground level and 0.6m depth of excavation below ground level; and</p> <p>(b) A maximum volume of filling above ground level of 20m<sup>3</sup> per site, and a maximum cumulative volume of filling and excavation of 50m<sup>3</sup> per site, in each case within any continuous period of 10 years; Or</p> <p>(c) The excavation and filling is associated with the maintenance and/or replacement of underground petroleum storage systems and where, following reinstatement of the underground petroleum storage systems, the site will have a finished contour that is equivalent to the ground level at the commencement of the works.</p> <p>P15 – Filling or excavation in Rural zones that is not provided for above, provided the activity meets the following conditions:</p> <p>(a) A maximum height of 0.2m of filling above ground level and 0.6m depth of excavation below ground level; and</p> <p>(b) A maximum volume of filling above ground level of 100m<sup>3</sup> per site within any continuous period of 10 years; Or</p> <p>(c) The excavation and filling is associated with the maintenance and/or replacement of underground petroleum storage systems and where, following reinstatement of the underground petroleum storage systems, the site will have a finished contour that is equivalent to the ground level at the commencement of the works.</p> <p><i>Non-compliance = Restricted Discretionary</i></p>	
<p><b>Christchurch District Plan – Chapter 8: Subdivision, Development and Earthworks</b></p>	
<p><b>Objective 8.2.4 – Earthworks</b></p> <p>Earthworks facilitate subdivision, use and development, the provision of utilities, hazard mitigation and the recovery of the district.</p>	
<p><b>Policy 8.2.4.3 – Benefits of Earthworks</b></p>	

Recognise that earthworks are necessary for subdivision, use and development, the provision of utilities, hazard mitigation and the recovery of the district.	
<b>Policy 8.2.4.4 – Amenity</b> Ensure, once completed, earthworks do not result in any significant shading, visual impact, loss of privacy or other significant detraction from the amenity values enjoyed by those living or working in the locality.	
<b>Objective 8.2.5 – Earthworks Health and Safety</b> People and property are protected during, and subsequent to, earthworks.	
<b>Policy 8.2.5.1 – Land Stability</b> Avoid earthworks that will create a significant risk to people and property through subsidence, rockfall, cliff collapse, erosion, inundation, siltation or overland flows.	<b>Policy B1.1.4 – Land &amp; Soil</b> Require earthworks on slopes to be carried out in ways that minimise the likelihood of land slipping or slumping.
<b>Policy 8.2.5.2 – Nuisance</b> Ensure that earthworks avoid more than minor adverse effects on the health and safety of people and their property, and do not generate continuous or persistent noise, vibration, dust or odour nuisance.	<b>Policy B3.4.16 – Quality of Environment</b> Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.
<b>Policy 8.2.5.3 – Vehicle Movement</b> Ensure that the transportation to and from a site of earth, construction or filling material is safe and minimises adverse transport network and local amenity value effects.	
<b>Policy 8.2.5.4 – Earthworks Design</b> Ensure that earthworks over identified thresholds are designed to enable the anticipated land use.	
<b>Policy 8.2.5.5 – Management of Contaminated Land</b> Enable earthworks where necessary to appropriately manage land contamination.	
<b>Rule 8.9.2.1 – Earthworks: Permitted Activities</b> <i>In the interest of brevity, the relevant rules have been summarised here.</i> P1 – Earthworks are permitted, provided the following conditions are met: (a) Earthworks do not exceed the volumes displayed in Table 9 of the Plan. Earthworks volumes are specified for each Zone. Of particular relevance are the following volumes: i. Residential = 20m <sup>3</sup> /site ii. Industrial = 1000m <sup>3</sup> /ha iii. Commercial = ranging from 20m <sup>3</sup> /site to 200m <sup>3</sup> /ha to 1000m <sup>3</sup> /ha	<b>Rule 2.1 – Earthworks and Setbacks, Volume and Site Rehabilitation (TV)</b> Any earthworks that are able to meet the conditions listed under <b>Rule 2.1</b> is a permitted activity in Living Zones. Included in Rule 2.1 is the following condition: 2.1.1.6 Except where Rule 2.1.1.5 applies, any earthworks has: (a) a volume of not more than 2,000m <sup>3</sup> per project; and (b) a vertical cut face where no more than 5% of the total vertical cut is over 2 metres. <b>Rule 1.7 – Earthworks and Setbacks, Volume and Site Rehabilitation (RV)</b>



<p>iv. Rural = 100m<sup>3</sup>/ha</p> <p>v. Transport = No limit</p> <p>(b) Earthworks shall not exceed a maximum depth of 0.6m, other than in relation to farming activities, quarrying activities or permitted education activities.</p> <p>(c) Earthworks shall not occur on land which has a gradient that is steeper than 1 in 6.</p> <p>P3 – P5 – Earthworks in the vicinity of the National Grid or electricity distribution lines are permitted provided they can meet the conditions listed in the Plan relating to depth of earthworks.</p>	<p>Any earthworks which meet the following conditions shall be a permitted activity:</p> <p>1.7.1.2</p> <p>The earthworks do not exceed:</p> <p>(a) A vertical cut face where no more than 5% of the total vertical cut is over 2m; and</p> <p>(b) A maximum volume of 5000m<sup>3</sup> per project.</p> <p><b>Notes</b></p> <p><i>Rule 1.7.1.2(b) does not apply to earthworks associated with forming tracks, provided the track is not more than 10m wide. Rule 1.7.1.2(a)} does apply to forming tracks no more than 10m wide.</i></p> <p>1.7.1.3</p> <p>When the earthworks cease, the site is:</p> <p>(a) Filled and recontoured to the same state as the surrounding land; and</p> <p>(b) Replanted with vegetation which is the same as, or of similar species to, that which existed on the site prior to the earthworks taking place, except that where the site was vegetated with any plant pest, the site may be replanted with other species.</p> <p><b>Note</b></p> <p><i>Does not apply to earthworks associated with the preparation of building sites, roads or tracks or sites prepared for planting trees or other crops.</i></p>
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## **APPENDIX 11:**

### Selwyn District Council Record of Earthworks-Related Consent Applications Since 2006

<u>RC Number</u>	<u>Date</u>	<u>Proposal</u>	<u>Type</u>	<u>Conditions</u>	<u>Monitoring</u>	<u>Location</u>	<u>Zone</u>	<u>Outcome</u>	<u>Reason</u>	<u>NES</u>	<u>Notes</u>	<u>complaint</u>
R307827	2006	EARTHWORKS IN EXCESS OF 2000m3 IN LIVING 1A ZONE	Land Use - Discretionary		Y	Tai Tapu	L1A	RC Granted	subdivision		Earthworks in 25 Lots in Riverside Lane	
RC- 063541	2006	TO UNDERTAKE EARTHWORKS THAT EXCEED 2000m2	Land Use - Non-complying		Y	Rolleston	L1B	RC Granted	subdivision		Earthworks in 63 Lots through Burnham School Rd, Brookside Rd, Melville Cres, Emerson Lane	
RC- 065057	2006	LAND USE FOE ASSOCIATED EARTHWORKS DEVELOPMENT	Land Use - Discretionary		Y	Rolleston	L1B	RC Granted	subdivision		Earthworks in 7 Lots on Levi Rd and Beaumont Drive. Further information was requested before RC was Granted. Application was agreed that there was no need for public notification	
RC- 065125	2006	TO INSTALL CHAIRLIFT AND ASSOCIATED EARTHWORKS	Land Use - Discretionary		Y	Porter Heights Ski field	Rural-HC and AOL	RC Granted	upgrade		To replace T bar chair lift which required earthworks	
RC- 065231	2006	TO UNDERTAKE EARTHWORKS THAT EXCEED 2000m2	Land Use - Discretionary		Y	Lincoln	L1	RC Granted	subdivision			
RC- 065413	2007	TO ERECT DWELLINGS ON EACH LOT CREATED BY 065412 & UNDERTAKE EARTHWORKS	Land Use - Discretionary			Lincoln	L1	Deferred Under S.91	subdivision		Publicly notified, Joint hearing with Ecan	
RC- 075017	2007	EARTHWORKS FOR THE DEVELOPMENT OF SPORTSFIELDS	Land Use - Discretionary		Y	Rolleston	L1B	RC Granted	park			
RC- 075233	2007	TO UNDERTAKE EARTHWORKS	Land Use - Discretionary		Y	Port Hills	PH-ONL/AVL	RC Granted	new Buildings		Earthworks associated with the establishment of buildings	
RC- 075282	2007	TO CONSTRUCT WATER SKI LAKE AND ASSOCIATED EARTHWORKS	Land Use - Discretionary		Y	OP	Rural-OP	RC Granted	lake		Required RC from Ecan	
RC- 075372	2007	TO UNDERTAKE EARTHWORKS THAT EXCEED 5000m3 WITHIN THE LOWER PLAINS FLOOD AREA & TO ERECT OVERHEIGHT DWG ON 19 HA	Land Use - Discretionary		Y	OP	Rural-OP	RC Granted	new Dwelling		Building consent was also required. Consent also to Ecan. Excavation within the lower plains flood area	
RC- 075374	2007	TO ERECT DWELLING THAT INTRUDES THE RECESSION PLANE AND ASSOCIATED EARTHWORKS. ALSO A COVENANT TO HOLD 2 TITLES TOGETHER AS A DWELLING ALREADY EXISTS ON THIS LOT	Land Use - Restricted Discretionary		y	HC	Rural-HC	RC Granted	new Dwelling		Earthworks in association with erecting a dwelling	
RC- 075375	2007	TO UNDERTAKE EARTHWORKS TO DEVELOP A CAR PARK INCLUDING TOILET BLOCK AND INFORMATION KIOSK	Land Use - Restricted Discretionary		Y	HC	Rural-HC and ONL	RC Granted	carpark		Building consent was also required.	
RC- 075395	2007	TO UNDERTAKE EARTHWORKS THAT EXCEED 2000m3	Land Use - Discretionary		Y	Castle Hill	L1A	RC Granted	park		Earthworks on Recreational Reserve	
RC-075100	2007	CONSTRUCTION AND MAINTENANCE OF A WATER INTAKE PIPELINE INCLUDING ASSOCIATED EARTHWORKS	Land Use - Controlled			OP	Rural - OP	Further info Request	Water pipe		Further information was requested twice, after initial request information was received, but a second request occurred. S91 deferred the issue to Ecan granting a water permit. CPW zone runs through the property	

RC- 065458	2008	TO ERECT DWELLINGS AND ASSOCIATED EARTHWORKS AS CREATED BY 065457	Land Use - Non-complying			HC	Rural-HC and AOL	Withdrawn	subdivision	
RC- 085024	2008	TO UNDERTAKE EARTHWORKS TO CREATE STORMWATER TREATMENT & DETENTION PONDS	Land Use - Discretionary		Y	IP	Rural-IP	RC Granted	Storm water	Uptake earthworks for general site works and storm water treatment and detention basins. RC was applied to amend this RC, RC-085217
RC- 085153	2008	LAPSED CONSENT: TO ERECT A DWELLING AND ASSOCIATED EARTHWORKS ON EACH OF NINE LOTS CREATED BY 075501. See 125487	Land Use - Restricted Discretionary		Y	IP	Rural-IP	RC Granted	new Dwelling	Lapsed/Replaced with RC-135691. Dwelling earthworks
RC 085217	2008	VARIATION TO 085024 TO UNDERTAKE EARTHWORKS WITH MAXIMUM VARIATION TO 085024 TO UNDERTAKE EARTHWORKS WITH MAXIMUM	Land Use - Discretionary		Y	IP	Rural-IP	RC Granted	Storm water	An amendment of RC 085024
RC 085300	2008	TO UNDERTAKE EARTHWORKS ASSOCIATED WITH 085	Land Use - Restricted Discretionary	Y	Y	IP	Rural-IP	RC Granted	subdivision	
RC-075522	2008	TO CONSTRUCT A 40000m3 ON FARM STORAGE POND WITH EARTHWORKS EXCEEDING 5000m3	Land Use - Discretionary		Y	OP	Rural -OP	RC Granted	Storage Pond	Construct farm storage pond
RC-085172	2008	TO RETAIN EXISTING GARAGE AND UNDERTAKE EARTH	Land Use - Restricted Discretionary	Y	Y	Tai Tapu	L1A	RC Granted	subdivision	For 4 lots on Lincoln tai Tapu Rd
RC- 075116	2009	ASSOCIATED ROADING & EARTHWORKS CREATED BY 075115	Land Use - Discretionary	Y	Y	Rolleston	L1B	RC Granted	subdivision	Earthworks on a large subdivision of Lots
RC 085346	2009	FORMATION OF TWO FARM TRACKS TO LINK WITH EXISTING TRACK INCLUDING EARTHWORKS OF APPROX. 59,343 CUBIC METRES	Land Use - Discretionary	Y	Y	HC	Rural-HC	RC Granted	road/track	Construction of farm track
RC 085421	2009	TO UNDERTAKE EARTHWORKS FOR THE CONSTRUCTION OF WATER STORAGE DAMS	Land Use - Discretionary	Y	Y	OP	Rural -OP	RC Granted	storage pond	Application for farm storage pond
RC 085426	2009	TO UNDERTAKE EARTHWORKS & REMOVAL OF SHELTER BELT FOR REDEVELOPMENT OF SITE	Land Use - Non-complying	Y	Y	Rolleston	B2	RC Granted	subdivision	To conduct earthworks and remove landscaping that is required of by the plan. An Objection was lodge
RC 095071	2009	TO UNDERTAKE ROADING & EARTHWORKS ASSOCIATED WITH 095070	Land Use - Restricted Discretionary	Y	y	Lincoln	LZ	RC Granted	subdivision	Hearing required. Large subdivision Ormond Rd, Anaru Rd. RC with Ecan also. LURP area
RC 095089	2009	TO ERECT SECOND DWELLING AND DECOMMISSION EXISTING DWELLING ON COMPLETION WITH ASSOCIATED EARTHWORKS IN THE PORT HILLS ZONE	Land Use - Non-complying	Y	Y	Port Hills	Rural-PH	RC Granted	new Dwelling	Lapsed 2014, No Building consent. New Dwelling
RC 095175	2009	TO UNDERTAKE EARTHWORKS ASSOCIATED WITH 095	Land Use - Restricted Discretionary	Y	Y	Lincoln	L1	RC Granted	subdivision	Hearing required. Earthworks associated with subdivision, Ormond, Anaru Rd. Ecan consent. Work has not commenced (2016).

RC 095177	2009	TO UNDERTAKE EARTHWORKS FOR THE CONSTRUCTION OF A 34,000m3 WATER STORAGE DAM	Land Use - Discretionary	Y	Y	OP	Rural-OP	RC Granted	water pond	Construction of water storage pond
RC 095183	2009	TO ERECT DWELLING INCLUDING EARTHWORKS IN AN AREA OF OUTSTANDING LANDSCAPE	Land Use - Discretionary	Y	Y	Port Hills	Rural-PH ONL	RC Granted	new Dwelling	For new dwelling
RC 095285	2009	TO CARRY OUT EARTHWORKS IN RELATION TO SUBDIVISION 095284 WITH A MAXIMUM CUT HEIGHT OF 3.5 METRES AND AN AVERAGE CUT HEIGHT OF 2 METRES	Land Use - Discretionary	Y	Y	OP	Rural-OP	RC Granted	subdivision	For subdivision
RC 095317	2009	OUTLINE PLAN FOR EARTHWORKS AND PRE CAST PANELS IN AN EXISTING TRAINING FACILITY	Land Use - Controlled	Y	Y	OP	OP- DE1	RC Granted	EW	
RC-075469	2009	TO CARRY OUT EARTHWORKS TO CONSTRUCT THE DIVERSION, DIVERSION CHANNEL, WETLAND AND DOWNSTREAM CHANNELS ASSOC, WETLAND AND DOWNSTREAM CHANNELS ASSOC. WITH THE LEESTON NORTH STORMWATER	Land Use - Discretionary	Y	Y	Leeston	LXA	RC Granted	storm water	Notification required. Application to construct a storm water mgmt. system
RC-0851178	2009	TO UNDERTAKE EARTHWORKS FOR THE CONSTRUCTION OF BUILDING PLATFORMS IN THE LOWER PLAINS FLOOD AREA	Land Use - Non-complying	Y	Y	IP	Rural-IP	RC Granted	New Building	RC has lapsed-2014
105282	2010	TO UNDERTAKE EARTHWORKS TO CONSTRUCT TWO IRRIGATION STORAGE PONDS	Land Use - Discretionary	Y	Y	OP	Rural -OP	RC Granted	Storage Pond	
R C 105008	2010	TO CONSTRUCT AN ON-FARM IRRIGATION STORAGE DAM AND ASSOCIATED EARTHWORKS	Land Use - Discretionary	Y	Y	OP	Rural-OP	RC Granted	storage dam	Farm storage dam
RC 085401	2010	TO UNDERTAKE EARTHWORKS ALSO SEE 105050	Land Use - Discretionary	Y	Y	IP	Rural-IP	RC Granted	new Dwelling	Granted by Environment Court. To erect a dwelling
RC 095018	2010	TO CONSTRUCT A PRIVATE SWIMMING POOL INCLUDING EARTHWORKS IN THE PORT HILLS	Land Use - Non-complying	Y	Y	Port Hills	Rural-PH	RC Granted	pool	Personal pool next to established dwelling
RC 105043	2010	TO ERECT DWELLING WITHIN THE PORT HILLS ZONE AND TO UNDERTAKE ASSOCIATED EARTHWORKS	Land Use - Discretionary	Y	Y	IP	Rural-IP	RC Granted	new Dwelling	Building consent. The need for a covenant on hedge?
RC 105044	2010	TO UNDERTAKE EARTHWORKS FOR THE CONSTRUCTION OF A WATER STORAGE POND	Land Use - Discretionary	Y	Y	OP	Rural-OP	RC Granted	storage pond	Farm storage pond
RC 105050	2010	TO UNDERTAKE ADDITIONAL EARTHWORKS TO 085401	Land Use - Discretionary	Y	Y	PH	PH (lower slope)	RC Granted	new Dwelling	Earthworks with approved dwelling
RC 105122	2010	TO CONSTRUCT AN ON-SITE IRRIGATION STORAGE DAM AND ASSOCIATED EARTHWORKS	Land Use - Discretionary	Y	Y	OP	Rural-OP	RC Granted	storage dam	
105352	2011	TO ERECT DWELLING AND UNDERTAKE ASSOCIATED EARTHWORKS IN THE PORT HILLS. Variation see 135147	Land Use - Discretionary	Y	Y	Port Hills	Rural-PH	RC Granted	new Dwelling	

115083	2011	TO UNDERTAKE EARTHWORKS ASSOCIATED WITH 1151	Land Use - Discretionary			Lincoln	L1 (LURP)	Suspended by Applicant	subdivision	Same site as RC 105253.
115268	2011	TO UNDERTAKE EARTHWORKS ASSOCIATED WITH STAGE 2B SUBDIVISION AT GAINSBOROUGH	Land Use - Discretionary	Y	Y	West Melton	L1B	RC Granted	subdivision	Subdivision and expanding storm water basin
115293	2011	TO UNDERTAKE EARTHWORKS AND ESTABLISH ROADING ASSOCIATED WITH 115292. VARIATION SEE 125058	Land Use - Discretionary	Y	Y	Lincoln	LZ	RC Granted	subdivision	
115329	2011	TO UNDERTAKE EARTHWORKS TO CONSTRUCT AND REALIGN THE BISHOPS CREEK WATERWAY	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	waterway	Relocate Bishops creek
RC 105253	2011	TO UNDERTAKE EARTHWORKS	Land Use - Discretionary			Lincoln	L1 (LURP)	Suspended by Applicant	EW	Area in LURP Green Zone, Same site as a previous earthworks RC
115173	2012	TO UNDERTAKE EARTHWORKS AND ESTABLISH ROADING ASSOCIATED WITH 115172	Land Use - Discretionary	Y		Lincoln	L1	RC Granted	subdivision	Subdivision development Lots,
115274	2012	TO ESTABLISH RESIDENTIAL ACTIVITIES ON EA OF 69 LOTS CREATED BY 115273 INCL EARTHWORKS, ROADING & BREACH OF BULK AND LOCATION STANDARDS	Land Use - Non-complying	Y		Rolleston	LZ	RC Granted	subdivision	
115370	2012	TO UNDERTAKE EARTHWORKS ASSOCIATED WITH 1151	Land Use - Restricted Discretionary	Y	Y	Rolleston	B2A	RC Granted	subdivision	Granted by independent commissioner
125007	2012	TO UNDERTAKE EARTHWORKS WITHIN 5M OF A WATERWAY TO ESTABLISH THE LINCOLN STORMWATER TREATMENT WETLANDS	Land Use - Discretionary	Y	Y	OP	Rural -OP	RC Granted	Storm water	Granted by independent commissioner. Earthwork within 5kn of LII stream to establish Lincoln storm water treatment wetlands
125018	2012	To undertake earthworks associated with 125017 (replaced by RC135262)	Land Use - Discretionary	Y	Y	Rolleston	LZ	RC Granted	subdivision	
125043	2012	To undertake earthworks for the Parklane subdivision of approx. 73,500m3	Land Use - Restricted Discretionary	y	y	Rolleston	L2	RC Granted	subdivision	
125067	2012	To undertake earthworks that exceed 2000m2	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	effluent pond	effluent pond, storm water swales
125134	2012	To undertake earthworks within 10m of a waterway that exceed 2000m2. Withdrawn & replaced by 125300	Land Use - Restricted Discretionary	y	y	Leeston	L1	Withdrawn	water	Replace by amended application 125300
125212	2012	To undertake earthworks associated with 125211 exceeding 2000m3	Land Use - Discretionary			Rolleston	LZ	RC Granted	subdivision	
125224	2012	To establish an industrial activity in the rural zone, composting and earthworks	Land Use - Discretionary			IP	Rural -IP	Deferred Under S.91	industrial	Ecan consent needed

125228	2012	To undertake earthworks and roading not in compliance with the district plan requirements & to undertake earthworks, subdivision and the erection of dwellings not in compliance with the `National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health` associated with 125227	Land Use - Discretionary	y	y	Lincoln	L1	RC Granted	subdivision	NES	
125258	2012	To establish roading with non-complying setback from intersections, earthworks exceeding permitted volume and within 10m of a waterway and to store construction materials for longer than 4 months.	Land Use - Discretionary	y	y	Lincoln	LZ (LURP)	RC Granted	subdivision	Subdivision roading	complaint
125265	2012	To construct an effluent storage tank and associated earthworks	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	effluent pond	effluent storage tank	
125279	2012	To establish and operate an open cast rock quarry at Big Ben Station, Coleridge	Land Use - Discretionary			HC	Rural-HC	Suspended by Applicant	quarry	awaiting eco and landscape assessments	
125288	2012	To erect a dwelling and associated earthworks in an area of outstanding landscape	Land Use - Controlled	y	y	IP	Rural-IP (ONL)	RC Granted	new Dwelling	dwelling	
125300	2012	To undertake earthworks within 10m of a waterway that exceed 2000m3	Land Use - Discretionary	y	y	Leeston		RC Granted	waterway basins	waterway and storm water basins	
125347	2012	Earthworks associated with 125202	Land Use - Discretionary	y	y	Prebbleton	L1A6	RC Granted	subdivision	subdivision 89 residential lots, earthworks and roading	
125370	2012	To undertake earthworks for roading and quarrying activities	Land Use - Discretionary	y	y	MH	Rural-MH	RC Granted	forestry	forestry harvest, forestry tracks and quarry for upgrading tracks	
125433	2012	To undertake earthworks in the Port Hills Visual Landscape Zone	Land Use - Restricted Discretionary			Port Hills	Rural-IN (VLA)	Withdrawn	new Dwelling		
125442	2012	To undertake earthworks in association with subdivision 125421	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		
RC 085263	2012	TO UNDERTAKE EARTHWORKS EXCEEDING 2000m3 ASSOCIATED WITH 085262	Land Use - Restricted Discretionary			OP	Rural -OP	Lapsed	subdivision	Further information was requested but information was not received	
125429	2013	To undertake earthworks and quarrying activities for a ten year period. ALSO SEE 135255 FOR VARIATION	Land Use - Discretionary	y	y	MH	Rural-MH	RC Granted	forestry	Forestry earthworks and quarrying	
125457	2013	To undertake 21,000m3 of earthworks in association with subdivision 125453 and non-complying road width	Land Use - Restricted Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		
125492	2013	Earthworks associated with subdivision 125491	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		
125497	2013	Earthworks in association with 125496	Land Use - Restricted Discretionary	y	y	Lincoln	L1	RC Granted	subdivision		dust
135005	2013	Earthworks in association with 135002, Barton Fields development	Land Use - Discretionary	y	y	Lincoln	LZ (LURP)	RC Granted	subdivision		

135064	2013	To undertake earthworks exceeding permitted volume & to establish non-complying roads & access ways associated with 135063	Land Use - Discretionary	y		Rolleston	LZ	RC Granted	subdivision	
135109	2013	To undertake earthworks that may exceed 2000m3 associated with 135108	Land Use - Discretionary	y	y	Darfield	L1	RC Granted	subdivision	
135116	2013	Earthworks associated with vertical cut of over 2 metres	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	effluent pond	effluent storage pond
135134	2013	Non-complying roading design associated with 135133 and to undertake earthworks exceeding permitted volumes	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
135149	2013	To undertake earthworks to form access way and portion of Ahuriri Road. Sent to Justine Ashley @ Planz	Land Use - Discretionary	Y	Y	IP	Rural-IP (ONL,VAL)	RC Granted	subdivision	
135165	2013	To undertake earthworks to establish yards at Rolleston Prison	Land Use - Controlled	y	y	OP	Rural-OP	RC Granted	EW	Ecan involved with contamination DIS. Relocation of dwelling
135171	2013	To undertake earthworks associated with 135162	Land Use - Discretionary	y	y	Lincoln	L1	RC Granted	subdivision	Deferred under section 37 for 6 days.
135175	2013	To relocate a dwelling and undertake earthworks below 200mm in depth	Land Use - Controlled	y	y	Rakaia Huts	L1	RC Granted	Relocate Dwelling	Archaeological authority and Building consent needed.
135191	2013	Earthworks and vegetation clearance associated with electricity towers	Certificate of Compliance	y		Mixed	HC,MH,OP ,IP,LDef	RC Granted	power towers	associated with on going tower foundation refurbishment
135262	2013	Associated landuse consent (Subdivision RC135261) to undertake earthworks and roading works (replaces RC125018)	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
135302	2013	Lot 4000, Faringdon Subdivision. Associated earthworks - R135301	Land Use - Discretionary	y		Rolleston	IZ	RC Granted	subdivision	
135316	2013	Land use in association with 135315 for earthworks, NES and roading. Te Whariki S/D Stage 2C, D & F	Land Use - Discretionary	y	y	Lincoln	L1, L1A3, B3	RC Granted	subdivision	NES Re-consent stages for subdivision
135398	2013	Undertake earthworks associated with the proposed subdivision (RC135393); and construct a local road less than the minimum 13.0m width.	Land Use - Discretionary	y		Rolleston	LZ	RC Granted	subdivision	subdivision and roading
135461	2013	Undertake earthworks across the site associated with the subdivision and development of the site for residential purposes 135112	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	complaint
135529	2013	Undertake earthworks in association with the geotechnical investigations sought under RC135528	Land Use - Discretionary	y	y	IP	Rural-IP	RC Granted	road	Geotechnical, Southern Motorway
135614	2013	Lot 5000. Undertake earthworks in association with subdivision consent 135613	Land Use - Non-complying	y	y	Rolleston	LZ	RC Granted	subdivision	subdivision
135634	2013	Undertake earthworks associated with the establishment & operation of upgraded facilities	Land Use - Restricted Discretionary	y	y	Porters	Rural-HC	RC Granted	upgrade	Upgrade of facilities



RC-085004	2013	TO ERECT DWELLING & ASSOCIATED EARTHWORKS ON EACH LOT CREATED BY 085003 INCLUDING CHANGE TO APPLICATION SO AS NOT TO RESTRICT EARTHWORKS TO A SPECIFIED DEPTH.RCVD 22/5/08	Land Use - Restricted Discretionary		y	IP	Rural-IP	RC Granted	subdivision	
135361	2014	Undertake earthworks in association with the opening and closing of Te Waihora/Lake Ellesmere.	Land Use - Controlled			OP	Rural-OP	RC Granted	water	Notification and Hearing required. Granted by independent commissioner
135676	2014	Undertake earthworks in association with 135674 Flemington. See also change of conditions RC145264. NES	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	Subdivision with storm water ponds
135691	2014	Lots 1-4 & Lots 6-11. Undertake earthworks in a silent file area and allow site access from SH 75	Land Use - Restricted Discretionary	y	y	IP	Rural-IP (VAL/ONL)	RC Granted	subdivision	To allow access to highway
135704	2014	Lot 703. Associated landuse for earthworks and the establishment of a roading network. NES.	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	
145003	2014	Lot 1, Lot 2, Pt Lot 2. Undertake earthworks in association with the establishment of a storage dam.	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	storage pond	storage irrigation dam
145014	2014	Lot 1. Construct an irrigation dam which will exceed the permitted vertical cut face of 2m and 5000m3 in earthworks.	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	irrigation dam	
145034	2014	Undertake earthworks associated with 145033. Hillview	Land Use - Discretionary	y	y	Prebbleton	LZ	RC Granted	subdivision	dust
145040	2014	Lot 602. Undertake bulk earthworks on the balance of the Liffey Springs subdivision	Land Use - Discretionary	y	y	Lincoln	L1	RC Granted	subdivision	roading, water, landshaping
145085	2014	Lot 3. Undertake earthworks within a culturally sensitive area.	Land Use - Controlled	y	y	Rakaia Huts	L1	RC Granted	new Dwelling	erect new dwelling, site within wahi taonga mgmt. area.
145090	2014	Lot 5001, 5004, 5005. Carry out approximately 15,000m3 of associated earthworks.	Land Use - Restricted Discretionary	y		Rolleston	LZ	RC Granted	subdivision	
145091	2014	Lot 37-38. Associated land use consent for earthworks (145023). NES.	Land Use - Controlled			Prebbleton	LX	RC Granted	subdivision	NES subdivision subject to NES-Contaminant in soils
145137	2014	Lot 1502 & 1503. Undertake earthworks associated with 145135.	Land Use - Discretionary	y	y	Lincoln	L1	RC Granted	subdivision	
145177	2014	Land use consent for earthworks relating to subdivision RC145155	Land Use - Discretionary	y	y	Tai Tapu	L1A	RC Granted	subdivision	
145247	2014	To undertake earthworks associated with subdivision 145246,including the remediation of contaminated land on Lots 54 and 205 and to erect fences along the Trents Road boundary of Lots 55 - 59 and 73 - 75 that exceed 1m in height. NES.	Land Use - Non-complying	y	y	Prebbleton	LZ	RC Granted	subdivision	
145294	2014	Undertake earthworks in association with subdivision consent 145293	Land Use - Discretionary			Prebbleton	LZ	Withdrawn	subdivision	subdivision. Application withdrawn as requested by applicant
145309	2014	Establish a facility to process lily bulbs; and undertake earthworks associated with the building of a storage pond (see 145333)	Land Use - Discretionary			OP	Rural-OP	Withdrawn	storage pond	storage pond. Application withdrawn as requested by applicant

145314	2014	Landuse consent for earthworks and roading non-compliances. See also subdivision consent 145313.	Land Use - Discretionary			Rolleston	LZ	RC Granted	subdivision	
145342	2014	To erect a dwelling in the Visual Amenity Landscape, with associated earthworks and access to a strategic road	Land Use - Discretionary	y	y	IP	Rural-IP (VAL)	RC Granted	new Dwelling	to erect a dwelling
145403	2014	To construct an irrigation dam, which will exceed the permitted vertical cut face of 2m and 5000m3 in earthworks	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	irrigation dam	
145406	2014	Undertake earthworks in association with Beaumont Park subdivision 145405	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
145418	2014	To undertake earthworks associated with s/d 145417	Land Use - Restricted Discretionary	y	y	Prebbleton	LZ	RC Granted	subdivision	
145510	2014	To undertake earthworks associated with Stg 7a and 7b of Faringdon. See s/d 145509.	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
145539	2014	To undertake earthworks associated with RC145386	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	Subdivision
145544	2014	To undertake earthworks associated with 145543, Stonebrook.	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
145549	2014	To erect dwelling and garage in Outstanding Natural Landscape area and associated earthworks	Land Use - Restricted Discretionary	y	y	Port Hills	Rural-PH (ONL)	RC Granted	new Dwelling	dwelling and garage
145552	2014	To undertake earthworks associated with subdivision 145551.Stg 3 Barton Fields. NES.	Land Use - Restricted Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	complaint
145582	2014	To undertake earthworks associated with subdivision 135488 exceeding the permitted volumes.	Land Use - Discretionary	y	y	Kirwee	L2A	RC Granted	subdivision	
145585	2014	To undertake earthworks with association with 145584. Te Whariki S/D Stage 2 G & L	Land Use - Discretionary	y	y	Lincoln	L1A3	RC Granted	subdivision	
1452283	2014	Associated land use for 145282 for earthworks in excess of the volume permitted by the District Plan.	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
145471	2015	To undertake earthworks associated with subdivision 145470, including remediation of contaminated land. NES.	Land Use - Discretionary	y	y	West Melton	L2	RC Granted	subdivision	No hearing required
145604	2015	To undertake earthworks associated with subdivision 145600 Flemington. NES.	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	
145690	2015	To undertake earthworks associated with subdivision 145689. NES.	Land Use - Discretionary	y	y	Prebbleton	Rural-IP	RC Granted	subdivision	
155024	2015	Undertake Earthworks on HAIL Site at Leeston Consolidated School in accordance 145657 (NES)	Land Use - Controlled	y	y	Leeston	L1	RC Granted	Replace building NES	earthworks on site
155027	2015	To undertake earthworks associated with S/D 155026. Ascot Park	Land Use - Restricted Discretionary	y	y	Darfield	L1	RC Granted	subdivision	

155075	2015	To undertake earthworks associated with S/D 155074. NES. Stg 1B Barton Fields.	Land Use - Restricted Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	
155088	2015	To install four culverts within the bed of an unnamed tributary of the Hanmer Road Drain. To undertake earthworks within 20m from the edge of any waterbody (excl aquifers).	Land Use - Discretionary	y	y	OP	Rural -OP	RC Granted	Culverts	installation of culverts close to a tributary
155138	2015	To erect a new dwelling with an attached oversized family flat including undertaking earthworks within 20m of a waterbody.	Land Use - Non-complying	y	y	IP	Rural-IP	RC Granted	new dwelling	
155143	2015	Undertake Earthworks in Association with RC155142	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	
155215	2015	Extension of time to RC105278 to erect a dwelling, with associated earthworks, in the Port Hills zone.	Land Use - Discretionary	y	y	IP	Rural-IP (ONL)	RC Granted	new Dwelling	extension of time on RC 105278
155228	2015	To undertake earthworks as part of S/D 155227. Stg 6, 7, 8 of Sterling Park.NES	Land Use - Restricted Discretionary	y	y	Prebbleton	LZ	RC Granted	subdivision	
155244	2015	To undertake earthworks relating to RC155243 in lzone.	Land Use - Restricted Discretionary	y	y	Rolleston	B2	RC Granted	subdivision	
155250	2015	To undertake earthworks associated with creation of an earth bund adjacent to CSM2.	Land Use - Discretionary	y	y	IP	Rural-IP	RC Granted	earth bund/roading	creation of an earth bund
155257	2015	Earthworks in association with s/d RC155182. NES.	Land Use - Controlled	y	y	Lincoln	LZ	RC Granted	subdivision	
155263	2015	To exceed earthworks volumes, to create roads with non-complying intersection setbacks and widths and exceed the 4 month period for storage of outdoor construction materials. See also S/D 155262. Stgs 10 to 18B Rosemerryn	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision	roading mounds in subdivision
155279	2015	To undertake earthworks to construct a water storage pond.	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	storage pond	water pond
155300	2015	To erect a dwelling in the Visual Amenity Landscape area which exceeds the permitted height and earthworks.	Land Use - Discretionary	y	y	IP	Rural IP - VAL	RC Granted	new Dwelling	new dwelling in VAL
155364	2015	To undertake earthworks to erect a house in Rakaia Hut within a wahi taonga management area C39(b).	Land Use - Controlled	y	y	Rakaia Huts	L1 (wahi taonga Mgmt.)	RC Granted	new Dwelling	
155396	2015	To carryout earthworks in association with subdivision of Stages 3 to 6 of Beaumont Park. See S/D 155395.	Land Use - Restricted Discretionary			Rolleston	LZ	Withdrawn	subdivision	Not required. See previous LU 145406. (subdivision)
155398	2015	Associated earthworks relating to subdivision RC155397	Land Use - Discretionary	y	y	Tai Tapu	L1A	RC Granted	subdivision	
155531	2015	To carry our earthworks. Ref S/D RC155530 & RC165559	Land Use - Restricted Discretionary			Castle Hill	L1A	Further info Request	subdivision	subdivision. RFI sent & waiting for Geotech 5 Oct 15
155607	2015	To carry out earthworks associated with S/D RC155606. Also See RC155192A/B. NES.	Land Use - Discretionary	y	y	Kirwee	L1	RC Granted	subdivision	

105387	2016	EARTHWORKS ASSOCIATED WITH OPENING & CLOSING LAKE ELLESMERE TO THE SEA	Land Use - Discretionary					Withdrawn	new Dwelling	Was placed on hold at applicants request and withdrawn in 2016
155606	2016	To subdivide to create 22 residential lots and associated earthworks L/U RC155607. See RC155192 A/B	Land Use - Restricted Discretionary	y	y	Kirwee	L1	RC Granted	subdivision	
165001	2016	To undertake earthworks in excess of 5,000m3 in order to excavate and construct piggery effluent treatment ponds. See RC155117	Land Use - Restricted Discretionary	y	y	OP	Rural-OP	RC Granted	effluent pond	effluent pond. Granted by independent Commissioner
165089	2016	To establish cut faces greater than 2m associated the effluent ponds and to undertake earthworks of approximately 19,500m3. This exceeds the permitted vertical limit cut face of 2m and 5000m3 in earthworks.	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	effluent pond	
165166	2016	To carry out earthworks required for building work under the NES.	Land Use - Restricted Discretionary	y	y	Darfield	B2	RC Granted	EW	NES Contaminants in soil
165192	2016	To erect a shed, store and use hazardous substances, install a subsurface balance tank and undertake earthworks on the Fonterra Darfield Milk Processing site.	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	New Building	new shed and subsurface tank
165200	2016	Earthworks to bury an electrical cable	Land Use - Restricted Discretionary	y	y	OP	Rural-OP	RC Granted	cables	digging in cables
165208	2016	Earthworks to realign a waterway	Land Use - Restricted Discretionary	y	y	MH	Rural -MH	RC Granted	waterway	waterway moving
165216	2016	Undertake earthworks for the purpose of forming roads and installing services.	Land Use - Restricted Discretionary	y	y	IP	Rural-IP	RC Granted	subdivision	roads and surfaces in subdivision
165237	2016	To undertake earthworks and roading associated with RC165236	Land Use - Restricted Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	roading and surfaces in subdivision
165240	2016	To undertake earthworks to erect a house in Rakaia Huts within a Wahi Taonga management area C39(b).	Land Use - Restricted Discretionary	y	y	Rakaia Huts	L1	RC Granted	new Dwelling	new dwelling in Wahi Taonga Mgmt. Area
165282	2016	Earthworks with regards to wastewater system upgrade and restoring and enhancing the riparian margins of Waiekekewai Creek.	Land Use - Restricted Discretionary	y	y	OP	Rural-OP	RC Granted	wastewater	wastewater system
165404	2016	To undertake earthworks of 40,000sqm for the construction of an irrigation storage pond.	Land Use - Restricted Discretionary	n	y	OP	Rural-OP	RC Granted	irrigation pond	irrigation storage pond
165417	2016	Earthworks associated with S/D RC165321. See RC165322 HASHA	Land Use - Restricted Discretionary	y	y	IP	Rural -IP	RC Granted	subdivision	granted by independent commissioner. Subdivision
165441	2016	Earthworks associated with RC165440	Land Use - Restricted Discretionary	y	y	Rolleston	B2A	RC Granted	subdivision	subdivision. Contamination issues

165461	2016	Earthworks associated with RC165460 NES.	Land Use - Restricted Discretionary	y	y	Prebbleton	L1A	RC Granted	subdivision		dust
165474	2016	To undertake earthworks associated with RC165473.	Land Use - Restricted Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision		
165484	2016	Earthworks associated with S/D 165482. See 165483. HASHA	Land Use - Restricted Discretionary	y		IP	Rural -IP	RC Granted	subdivision		granted by independent. Subdivision
165487	2016	Earthworks associated with S/D 165485 See 165486 HASHA	Land Use - Restricted Discretionary			IP	Rural -IP	On Going	subdivision		Written Approval Requests to Affected Parties. Subdivision
165508	2016	Earthworks for RC165454. RC165455 RC165509 HASHA	Land Use - Restricted Discretionary	y		IP	Rural -IP	RC Granted	subdivision		Limited notification required, hearing required
165527	2016	To undertake earthworks. NES	Land Use - Restricted Discretionary	y	y	Darfield	B1	RC Granted	EW	NES	NES earthworks on site
165529	2016	Earthworks associated with the installation of a wastewater pipeline.	Land Use - Restricted Discretionary	y	y	IP	Rural-IP	RC Granted	Water pipe		water pipes install
165538	2016	Earthworks associated with RC165537 NES	Land Use - Restricted Discretionary			Lincoln	LZ	On Hold	EW	NES	NES. Contaminants in soil
165608	2016	To undertake earthworks.	Land Use - Restricted Discretionary	y	y	Rolleston	B2A	RC Granted	ew	NES	contaminants in soil
165639	2016	Earthworks associated with RC165638 NES	Land Use - Restricted Discretionary		y	IP	Rural-IP	RC Granted	subdivision	NES	NES. Contaminants in soil
1653559	2016	To carry out earthworks required for remediation work under the NES.	Land Use - Restricted Discretionary	y	y	Lincoln	LZ	RC Granted	EW	NES	NES works. Remediation
165540	2017	To construct an acoustic fence and to undertake earthworks in association with subdivision 165639	Land Use - Discretionary	y	y	Southbridge	L1	RC Granted	subdivision		fence/barrier
165552	2017	To undertake a subdivision to create 24 rural residential lots. See RC165683 Earthworks	Land Use - Restricted Discretionary	y	y	Prebbleton	L3	RC Granted	subdivision		
165641	2017	Earthworks associated with 165456	Land Use - Restricted Discretionary	y	y	Leeston	L2	RC Granted	subdivision		Notification Required.
165647	2017	Earthworks and to erect a dwelling exceeding the permitted height	Land Use - Restricted Discretionary	y		Port Hills	Rural-PH (ONL)	RC Granted	new Dwelling		Dwelling
165649	2017	To undertake a subdivision to create 70 residential lots. See L/U Earthworks RC175002	Land Use - Restricted Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		

165683	2017	Earthworks associated with RC165552	Land Use - Restricted Discretionary	y		Prebbleton	L3	RC Granted	subdivision		roading
165686	2017	Earthworks associated with RC165616	Land Use - Restricted Discretionary			Rolleston	LZ	Withdrawn	subdivision		subdivision. Limited notification required
175017	2017	To undertake earthworks in association with 175016. Te Whariki S/D Stage 2H, I, J & K. See 175048	Land Use - Discretionary	y	y	Lincoln	LZ	RC Granted	subdivision		
175029	2017	Earthworks associated with RC175026 NES	Land Use - Discretionary	y		Prebbleton	L1A	RC Granted	Boundary	NES	NES. Contaminants in soil. Rural Boundary adjustment
175071	2017	Earthworks associated with 175070	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		subdivision . Independent commissioner, limited notification required, hearing required
175088	2017	A site office and extrusion plant with associated earthworks and storage of diesel. Area 1. See 175221 for Area 2 & 3	Land Use - Discretionary	y	y	OP	Rural-OP	RC Granted	relocation building		relocation of building
175090	2017	Earthworks which exceed the maximum volume permitted and to construct a non-complying ROW and road, associated with 175089 NES	Land Use - Discretionary	y	y	Prebbleton	L1A	RC Granted	subdivision	NES	roading and NES
175131	2017	Earthworks to construct a storage dam and the clearance of indigenous vegetation	Land Use - Non-complying	y	y	MH	Rural-MH	RC Granted	storage dam		storage dam
175172	2017	Earthworks associated with 175169 NES	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	NES	Subdivision. NES. Contaminants in soil
175198	2017	Earthworks associated with 175197 NES	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	NES	Subdivision. NES. Limited Notification Required. Hearing required
175205	2017	To undertake earthworks in accordance with 175204	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision		subdivision
175221	2017	A site office and extrusion plant with associated earthworks and storage of diesel. Area 2 & 3. See 175088 for Area 1	Land Use - Non-complying	y	y	OP	Rural-OP	RC Granted	new building		establish new extrusion plants, and storage
175242	2017	Earthworks associated with RC175239 See S/D 175239 Falcon`s Landing Stage 1C-D	Land Use - Restricted Discretionary			Rolleston	LZ	Suspended by Applicant	subdivision		Subdivision. Limited Notification Required . Hearing required
175244	2017	Earthworks associated with RC175241. IPort Stage 8 & 9. See 175241, 175248 & 175249	Land Use - Restricted Discretionary			Rolleston	B2A	Withdrawn	subdivision		to install services for subdivision
175245	2017	To construct roads and undertake earthworks in association with subdivision 175243 NES Falcon`s Landing Stage 5	Land Use - Discretionary	y	y	Rolleston	LZ	RC Granted	subdivision	NES	subdivision. Contamination issues. Limited notification required
175248	2017	Earthworks associated with RC175241 & vehicle entrance within 10m of a waterway. (Lot 808)IPort Stage 8 & 9 See 175241, 175244 & 175249	Certificate of Compliance	y		Rolleston	B2A	RC Granted	subdivision		

175249	2017	Earthworks associated with RC175241 & vehicle entrance within 10m of a waterway. (Lot 891)IPort Stage 8 & 9 See 175241, 175244 & 175248	Certificate of Compliance	y			Rolleston	B2A	RC Granted	subdivision		
175250	2017	Earthworks associated with RC165432 NES	Land Use - Controlled				Leeston	L1	RC Granted	EW	NES	contaminants in soil
175310	2017	To carry out earthworks associated with 175309	Land Use - Restricted Discretionary	y	y		Rolleston	LZ	RC Granted	subdivision		
175353	2017	Earthworks associated with 165327 NES	Land Use - Controlled				Lincoln	L1	RC Granted	Park	NES	NES. contaminants in soil
175370	2017	To carry out earthworks to increase the storage capacity of an existing irrigation dam.	Land Use - Discretionary	y	y		HC	Rural-HC	RC Granted	irrigation dam		Irrigation Dam
175409	2017	Earthworks associated with 175409 NES	Land Use - Restricted Discretionary				West Melton	L1B	On Going	EW	NES	Submissions are closing. NES. contaminants in soil
175457	2017	To carry out earthworks alongside a designated area to remove and replace a rail bridge and an outline plan to replace the bridge within the designation.	Land Use - Restricted Discretionary	y			HC	Rural-HC	RC Granted	upgrade		removal and replace rail bridge
175462	2017	Earthworks associated with subdivision 175461. Faringdon East. NES	Land Use - Discretionary	y	y		Rolleston	LZ	RC Granted	subdivision	NES	Contaminants in Soil. Subdivision work
175507	2017	Certificate of compliance for a residential dwelling, outbuildings and associated earthworks.	Certificate of Compliance				IP	Rural-IP	RC Granted	new Dwelling		establish a dwelling and garage
175579	2017	To carry out earthworks associated with 175578	Land Use - Restricted Discretionary				Kirwee	L2A	Deferred Under S.91	subdivision		
175627	2017	To carry out Earthworks. NES.	Land Use - Restricted Discretionary				Lincoln	B3	On Going	New Building		Just started. New building

## **APPENDIX 12:**

### Selwyn District Council SWOT Analysis



Relevant Legislation or Planning Document	Level of 'regard' required	Key Outcomes Sought	Key Approaches within District Plan for achieving these outcomes?	Comments arising from a review of resource consent data, complaints, monitoring etc	Feedback from other sources i.e. community, stakeholders, consultants etc	Overall assessment of whether the District Plan achieves the outcomes sought?
<b>LAND AND SOIL – TOWNSHIP AND RURAL VOLUMES</b>						
<b>RMA 1991</b> Section 7 Other Matters (b) the efficient use and development of natural and physical resources; (f) maintenance and enhancement of the quality of the environment; (g) any finite characteristics of natural and physical resources	High	<ul style="list-style-type: none"> <li>Efficient use of soil resources;</li> <li>Maintenance of the quality of soils;</li> <li>Consideration of finite characteristics i.e. versatile soils.</li> </ul>	See provisions identified under RPS below.	As per RPS below.	As per RPS below.	As per RPS below.
<b>Regional Policy Statement</b> <ul style="list-style-type: none"> <li>Chapter 15: Soils;</li> <li>Chapter 17: Contaminated Land</li> <li>Definitions for Greater Christchurch</li> </ul>	High	<ul style="list-style-type: none"> <li> <b>Maintain and improve soil quality</b> to safeguard their mauri*, life supporting capacity, health and productive capacity (Objective 15.2.1);             Methods to achieve Objective 15.2.1 include the following:   <i>Territorial Authorities:</i>   <b>Will:</b>             (6) Set out objectives and policies, and may include methods in district plans that help ensure land use activities and land management practices do not cause significant long term adverse effects on soil quality.   <i>Local authorities:</i>   <b>Should:</b>             (8) Promote land-use practices that maintain and improve soil quality, prevent excessive discharge of substances that persist in soils and employ best practice techniques to reduce the accumulation of hazardous substances in soil. This should include supporting programmes of education, information and assistance for land-users and working with research, farming and other organisations.             (9) Take actions to avoid significant long-term adverse effects on soil quality from land-use and to remedy or mitigate soil degradation, where it has occurred, in undertaking their operations and activities.         </li> <li><b>Prevent induced soil erosion</b> (Objective 15.2.2);</li> </ul>	There are four key topic areas that address 'Land & Soil' across both the Township and Rural Volumes of the DP, being: <ol style="list-style-type: none"> <li>Contaminated land;</li> <li>Unstable land;</li> <li>Soil damage/erosion; and</li> <li>Loss of versatile soils.</li> </ol> The relevant provisions can be summarised as follows:  <u>Contaminated Land</u> <ul style="list-style-type: none"> <li>Provisions that manage activities to avoid creating contaminated land in the first instance, including policies and rules relating to hazardous substances, waste disposal, earthworks and forestry on slopes.</li> <li>Keeping an updated register of sites, possibly contaminated from past activities, and record the information on Land Information Memoranda (a "LIM").Controlling activities on contaminated land in the district plan, to avoid people being exposed to contaminants.</li> <li>Encourage people to clean up contaminated sites.</li> </ul> <u>Unstable Land</u> <ul style="list-style-type: none"> <li>Avoid creating unstable land in the first place by controlling large scale earthworks or earthworks on slopes.</li> <li>Keep and update a register of potentially unstable sites, and record that information on LIMs.</li> <li>Use powers under the Building Act 2004 to control erecting</li> </ul>	<b>Earthworks:</b>  <u>Westland Co-operative Dairy Co (125217) – Township Volume (Business Zone)</u>  Consent for a new dairy processing plant including three milk dryers and extensions to existing operations, buildings & structures.  In terms of the earthworks rules that restrict vertical cut faces to 2m and a 5000m <sup>3</sup> maximum volume, the planner's report identifies that the explanatory notes for earthworks in Chapter 14, Rule 14 states that the rules do not apply to several matters, including "landscaping..." and "building foundations and related activities".  Accordingly the 2.5m cut depth for the dryers and boiler are exempt from the rule and do not trigger consent. Similarly, most of the 17,000m <sup>3</sup> site earthworks will be for building foundations. As such, the volume and depth of earthworks that may be subject to the chapter 14 rules are most likely to be less than the 5000m <sup>3</sup> and 2m depth triggering consent, or if it exceeds the limits the degree and effect of non-compliance would be insignificant - particularly when the size of the 11.6ha site is considered. The rule applies to all sites irrespective of size. If the site were subdivided into several sites, it would be possible to have 5000m <sup>3</sup> on each site.  In terms of timing, the DP requires that earthworks do not occur over more than a 12 month period. The anticipated construction period for stage 1 is 18 months, although it is not expected that earthworks will occur over this full period, and as detailed above earthworks related to	<ul style="list-style-type: none"> <li>Absence of specific objectives and policies addressing quarry activities – Planning evidence of Aggregate &amp; Quarry Assn to Proposed RPS (2011).</li> <li>See email response from Ecan re: overlap with regional rules (dated 1/08/2016)</li> <li>Consultation with SDC Consents planners and consultants regarding the overlap with ECan earthworks provisions, including the preparation of a joint s42A report for a water storage dam proposal that triggered resource consents under both the SDP and LWRP. Feedback received has been incorporated into the SWOT.</li> </ul>	<b>Strengths:</b> <ul style="list-style-type: none"> <li>The Rural Volume accurately identifies all relevant issues, including the overarching need to maintain the life-supporting capacity of soils.</li> <li>Provisions seek to address issues of soil contamination, unstable land and soil erosion through an integrated approach with Environment Canterbury.</li> <li>The general earthworks maximum volume provisions are enabling in that they allow for small scale earthworks with (potentially) minor effects as permitted activities, but require resource consents on larger scale earthworks to ensure 'any effects are adequately remedied or mitigated, rather than trying to prevent large-scale earthworks per se'. There is a risk however that significant adverse effects could still arise from a complying volume of excavation or the use of the provisions on a 'per project' basis.</li> <li>Overall, the existing provisions of the SDP, combined with the supporting legislative requirements of HSNO and NESCS, generally achieve the policy outcomes sought by the RPS. The primary exception relates to the lack recognition given to the importance of soil quality in safeguarding cultural values (mauri).</li> </ul> <b>Weaknesses:</b> <ul style="list-style-type: none"> <li>Lack of clear direction for quarry activities – both in terms of recognising positive and adverse effects and addressing potential duplication with regional plans.</li> <li>The Township Volume has no clear identification of the issues stemming from land that has been contaminated previously.</li> </ul>

Relevant Legislation or Planning Document	Level of 'regard' required	Key Outcomes Sought	Key Approaches within District Plan for achieving these outcomes?	Comments arising from a review of resource consent data, complaints, monitoring etc	Feedback from other sources i.e. community, stakeholders, consultants etc	Overall assessment of whether the District Plan achieves the outcomes sought?
<b>LAND AND SOIL – TOWNSHIP AND RURAL VOLUMES</b>						
		<p>Methods to achieve Objective 15.2.1 include the following:</p> <p><i>Territorial Authorities:</i></p> <p><b>Should:</b></p> <p>(3) Consider including standards in a district plan that remove the requirement for a resource consent from the territorial authority for land development activities, if a resource consent is granted by the Canterbury Regional Council for the same purpose.</p> <p>(4) Set out objectives and policies, and may include methods in district plans, to control the development of land to avoid soil loss or erosion in accordance with this policy and any district plan soil discharge requirements arising from Chapter 7 - Fresh Water.</p> <p>This may include requiring land development that causes soil erosion to have effective sediment monitoring and retention measures, where there is potential for sediment run-off, and for earthworks to be designed and programmed so as to minimise the extent of exposed soil at any time.</p> <p><i>Local authorities:</i></p> <p><b>Will:</b></p> <p>(5) Identify Ngāi Tahu cultural values in relation to soil for inclusion in regional and district plans, through engagement with Ngāi Tahu, and at least in part, through relevant iwi management plans.</p> <p><b>Should:</b></p> <p>(6) Promote land-use practices that avoid soil erosion by supporting programmes of education, information and assistance for land-users and by working with research, farming and other organisations. Particular attention should be given to the need to maintain vegetative cover where soil is vulnerable to erosion.</p> <p>(7) Take actions to prevent land-uses from causing soil erosion and to remedy or mitigate soil erosion where it has occurred,</p>	<p>buildings and structures on unstable land.</p> <ul style="list-style-type: none"> <li>Avoid buildings being erected on unstable land.</li> </ul> <p><u>Soil damage/erosion</u></p> <ul style="list-style-type: none"> <li>Encourage work by Environment Canterbury and landowners to minimise risk of soil erosion or damage to soil structure.</li> <li>Manage large-scale earthworks, including controlling the removal of topsoil, and forestry on slopes.</li> </ul> <p><u>Loss of versatile soils</u></p> <ul style="list-style-type: none"> <li>Having regard to the loss of versatile soils in rezoning rural land for urban activities;</li> <li>Requiring land to be rezoned for urban activities to enable an assessment of the soil types and any impacts on the use of those soils for urban activities;</li> <li>Controlling residential density within the rural area;</li> <li>Monitoring the rate, quantity and type of soil being used for irreversible activities.</li> </ul> <p><u>Definition or "Earthworks"</u></p> <ul style="list-style-type: none"> <li>"Earthworks" are defined in both the Township and Rural Volumes, however there is some inconsistency in terms of the exemptions contained within the definitions and those identified in the 'Notes' at the commencement of the relevant rule chapters.</li> </ul>	<p>building foundations are not subject to the rule.</p> <p>The applicant will be required to comply with Ecan requirements under its Erosion and Sediment Control guidelines, as well as complying with NRRP rules concerning fugitive dust emissions. The applicant has also volunteered a condition to require a construction management plan.</p> <p>Overall, it was found that the proposal is consistent with the overall objectives and policies of the District Plan.</p> <p>Consent granted subject to conditions, including:</p> <ul style="list-style-type: none"> <li>Requirements to undertake best practicable measures to avoid or mitigate the dispersal and deposition of dust;</li> <li>Preparation of an Erosion and Sediment Control Plan, an Environmental Construction Management Plan and a Complaints Register;</li> <li>Requirement to re-establish grass through "hydroseeding" or similar.</li> </ul> <p><u>Other consents reviewed within urban areas:</u></p> <p>It is noted that other consent applications involving large scale earthworks in the Business 2 zone did not identify the exemption for "landscaping" and "building foundations and related activities", as occurred with the Westland Milk consent. Such examples include the Port of Tauranga and Lyttelton Port 'inland port' applications.</p> <p><u>Fonterra Darfield (Stage 1) (105211) – Rural Volume</u></p> <p>This application involved the excavation of approx. 60,000m<sup>3</sup> of soil, all of which was to be re-used within the site. Overall, it was determined that in this case, there were a number of mitigation measures that can be applied to the proposal to ensure adverse effects from earthworks are minimised, including:</p> <ul style="list-style-type: none"> <li>the site is large and stockpiles of material could be well setback from the site boundaries and existing water races within the property to ensure that any stormwater runoff during heavy rain does not cause any</li> </ul>		<ul style="list-style-type: none"> <li>The Township Volume does not clearly identify that the issue of "permanent use of land for one activity" relates specifically to the loss of versatile soils for food production. The Rural Volume more accurately identifies this issue as the "irreversible use of versatile soils".</li> <li>The two DP Volumes apply a different approach to managing the loss of versatile soils, with the Township Volume seeking to "avoid" rezoning land that contains versatile soils for new residential or business development (Policy B1.1.8), compared to the Rural Volume that seeks to "encourage residential development to occur in and around townships (Policy B1.1.8).</li> <li>Potential effects on bank stability is covered within Policy B1.2.7 of the Township Volume, but not within the Rural Volume. As such, there is a lack of consistency in whether this issue needs to be addressed in terms of a 'land and soil' issue. It is also recognised that there is a crossover with the CLWRP, which contains provisions that manage earthworks within riparian margins.</li> <li>As part of managing the effects of contaminated land, the DP does not require an assessment of potential contamination at the time of subdivision i.e. only controls certain types of activities and/or the erection of buildings. However, it is recognised that this issue has now been addressed via the NESCS.</li> <li>The Township Volume includes a list of exemptions in Chapter 14 Business Zone Rules – Earthworks that includes "landscaping" and "building foundations and related activities". As such, it is apparent that at least one large scale development within the Rolleston B2 Zone was assessed as complying with the earthworks provisions, whereas other similar type of developments were not.</li> <li>The permitted activity standard of a maximum volume of 5,000m<sup>3</sup> per project could be undermined by a 'permitted baseline' that enables any number of 'projects' to be undertaken across an undefined land area.</li> <li>As mentioned under 'Strengths' above, the earthworks volume rule is an 'enabling' provision, however it is recognised that there is a risk that significant adverse effects could still arise from a complying volume of</li> </ul>

Relevant Legislation or Planning Document	Level of 'regard' required	Key Outcomes Sought	Key Approaches within District Plan for achieving these outcomes?	Comments arising from a review of resource consent data, complaints, monitoring etc	Feedback from other sources i.e. community, stakeholders, consultants etc	Overall assessment of whether the District Plan achieves the outcomes sought?
LAND AND SOIL – TOWNSHIP AND RURAL VOLUMES						
		<p>in undertaking their own operations and activities.</p> <p>(8) In conjunction with land users cooperate to develop methods including protocols to manage earthworks and sediment generation, including the delineation of responsibilities on a district by district basis.</p> <p>○ Protect people and the environment from both on-site and off-site <b>adverse effects of contaminated land</b> (Objective 17.2.1);</p> <p>Methods to achieve Objective 17.2.1 include the following:</p> <p><i>Territorial Authorities:</i></p> <p><b>Should:</b></p> <p>(7) Use the information provided by the Canterbury Regional Council from the listed land-use register to determine if land has been or is subject to a hazardous activity or industry when preparing Land Information Memoranda or prior to making a decision on a resource consent application.</p> <p><i>Territorial authorities:</i></p> <p><b>Will:</b></p> <p>(3) Set out objectives, policies or methods in district plans to require:</p> <p>(a) a site investigation of any land identified as actually or potentially contaminated, prior to any new subdivision or use of land or new development of land that that could result in an increase in any adverse effect resulting from any contamination of the land;</p> <p>(b) that any actual or potential adverse effects of contaminated land are avoided, remedied or mitigated in a manner that does not lead to further significant adverse effects on the environment; and</p> <p>(c) that any remediation or mitigation works for contaminated land do not lead to further significant</p>		<p>sedimentation effects beyond the site boundaries or to the water race;</p> <ul style="list-style-type: none"> <li>the site is relatively flat (albeit a 5m level change across the property) and no steep vertical cuts are proposed which would minimise the likelihood of soil erosion and further limit the ability of stormwater to runoff from the site to adjoining properties;</li> <li>there is an ability to ensure any dust nuisance from stockpiles or bare soil can be sprayed with water to ensure dust particles do not move off the site;</li> <li>the temporary nature of the stockpiles of material during construction; and</li> <li>the majority of material will be re-used on the site for the construction of the acoustic bund, the formation of construction platforms and other site works.</li> </ul> <p>As a result of these mitigating factors and the provision of either a Construction Management Plan or conditions controlling the location of stockpiles and excavation works from internal boundaries and water races, any actual or potential adverse effects on the environment arising from the proposed earthworks were found to be minor.</p> <p><u>Road Metals Company Ltd (105334) – Rural Volume</u></p> <p>This application was for the quarrying of 214ha, with 160,000m<sup>3</sup> of aggregate to be extracted annually. The site is to be progressively quarried and rehabilitated, including the establishment of 3m high bunds around the perimeter of the site.</p> <p>The proposal triggered the relevant earthworks standards by some margin. In terms of matters relevant to the 'Land &amp; Soil' chapter it is noted that the assessment of this proposal focussed on the rehabilitation of the site post-quarry activities. The use of clean-fill deposits, battering of slopes and resurfacing with topsoil means that the site can be returned to productive (pastoral) use and the potential for erosion or the creation of unstable land can be adequately mitigated.</p> <p>Notwithstanding, there are no provisions in the DP relating to the</p>		<p>excavation or the use of the provisions on a 'per project' basis.</p> <ul style="list-style-type: none"> <li>The assessment of effects associated with a breach in the 'earthworks' rules tends to focus heavily on amenity-related or cultural effects, rather than effects on soil damage and/or erosion, which is largely deferred to conditions requiring an Erosion &amp; Sediment Control Plan and/or regional council requirements. As such, the broad outcomes sought by the objectives and policies in the 'Land and Soil' Chapter are not given significant weight in the assessment of activities that breach the earthworks provisions.</li> <li>Resource consent applications for the use, storage, transportation or disposal of hazardous substances are primarily assessed under the more specific objectives and policies of the SDP, rather than any impact on soil resources under the 'Land and Soil' chapter. It is also apparent that many second generation plans are now deferring to HSNO for the management of hazardous substances.</li> <li>Soil erosion and earthworks involving unstable land are largely dependent on the provisions relating to Outstanding Natural Landscapes being triggered. The ONL overlay covers most, if not all, high soil erosion risk parts of the district. The scope for permitted earthworks within ONL areas is limited. As such, matters of soil erosion and/or stability can be addressed as part of an assessment of effects for a full discretionary activity under the ONL provisions.</li> <li>There is no recognition given to the importance of soil quality in safeguarding cultural values (mauri) within the 'Land and Soil' chapters, with any impact of earthworks being restricted to those occurring within culturally sensitive areas.</li> <li>The definition of "earthworks" in the Rural Volume references a number of exemptions, but not all of those are reflected within the exemptions listed under Note 1 under Rule 1 – Earthworks. As such, there is an issue of consistency and whether the exemptions should be contained in the definition, rather than in two different places. It is also noted that the "earthworks" definition in the Township Volume does not have any</li> </ul>



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LAND AND SOIL – TOWNSHIP AND RURAL VOLUMES						
		<p>adverse effects on the environment.</p> <p><i>Local authorities:</i></p> <p><b>Should:</b></p> <p>(4) Engage with Ngāi Tahu as tāngata whenua and use iwi management plans including Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008, to provide guidance about the cultural values associated with contamination of land or a particular site and guidance on appropriate remediation or mitigation measures.</p> <p><i>Local authorities</i></p> <p><b>Should:</b></p> <p>(4) Engage with Ngāi Tahu as tāngata whenua and use iwi management plans, including Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008, when determining the actual or potential effects of contaminants in the soil.</p> <p><i>Local authorities:</i></p> <p><b>Should:</b></p> <p>(7) Work together to consolidate information on a contaminated land register held by the Canterbury Regional Council.</p> <p>(8) Support central government or industry-led guidelines, codes of practice and environmental accords where these would lead to the achievement of objectives in the Regional Policy Statement, and recognise and implement any relevant national guidelines on contaminated land.</p> <p>(9) Engage with Ngāi Tahu as tāngata whenua and use iwi management plans, including Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Policy Statement 2008, when exercising functions relating to the contamination of land.</p> <p>○ Definition of “rural activities” for the Greater Christchurch Area includes</p>		<p>positive effects of quarrying or any wider (cumulative) impacts on soil quality caused by quarrying activities, aside from those generic provisions that seek to avoid significant adverse effects or in terms of managing amenity-related effects.</p> <p><u>Central Plains Water (155704) – Rural Volume</u></p> <p>This application is to construct, use and maintain water storage dam for up to 2.08 million cubic metres of water. The SDC land use consent is being processed jointly with an ECan consent for damming.</p> <p>The proposal breaches a number of the Earthworks rules in Part C1 (relating to volume, contaminated soil and rehabilitation), with the key effects identified as being related to:</p> <ul style="list-style-type: none"> <li>• Landscape and Visual Amenity;</li> <li>• Ecological Values;</li> <li>• Temporary Construction Effects (Traffic, Noise, Earthworks and Dust);</li> <li>• Cultural Values;</li> <li>• Hazards – Dam Breach;</li> <li>• Hazardous Substance Storage; and</li> <li>• Positive Effects of Increased Water Reliability.</li> </ul> <p>Interestingly, the potential effects identified that are of most relevance to the outcomes sought by the 'Land &amp; Soil' chapter related to the storage of hazardous substances. However, the s42A report defers this assessment to compliance with the Hazardous Substances and New Organisms Act. As such, no further consideration has been given to this matter.</p> <p>Recommended conditions of consent otherwise require the preparation and implementation of a (among other things) a Construction Management Plan; Dust Control Management Plan; Remediation Action Plan, Dam Safety Management Systems; and an Emergency Action Plan. The decision has yet to be issued at the time of writing.</p> <p><b>Contaminated Land:</b></p> <p><u>V. Morrison (155610) – Township Volume</u></p> <p>Proposal to remediate a contaminated site for residential purposes. Application assessed as a restricted discretionary activity under</p>		<p>of the exemptions listed within the definition itself.</p> <p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>○ Streamlining of provisions to avoid duplication with the NESCS and HSNO.</li> <li>○ Investigate a greater range of permitted activity standards to address potential adverse effects of earthworks activities that otherwise comply with the maximum volume and cut provisions, including the certification of Erosion and Sediment Control Plans and/or Construction Management Plans.</li> <li>○ Notwithstanding the above, investigation opportunities for reducing duplication and overlap with resource consents required by the Land &amp; Water Regional Plan and/or the building consent process.</li> <li>○ Consider the effectiveness of the earthworks provisions in light of the number of earthwork-related activities that are excluded from the relevant rules.</li> <li>○ Consider how the outcomes sought by the 'Land and Soil' objectives and policies should be integrated in the new 2GP due to the significant overlap with other provisions and/or legislation.</li> <li>○ Investigate whether quarrying activities should be specifically recognised and provided for.</li> </ul> <p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>○ Potential impact of RMA legislative changes through the DPR process.</li> <li>○ The ability to enforce earthworks rules that are not otherwise associated with an activity that requires building consent and/or resource consent for other reasons.</li> <li>○ The need to ensure that there is on-going collaboration with ECan regarding the identification, monitoring and recording of information relating to contaminated sites.</li> </ul>

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LAND AND SOIL – TOWNSHIP AND RURAL VOLUMES						
		<p>"<b>quarrying</b> and associated activities".</p> <p><i>* It is noted that the <b>cultural</b> impacts arising from earthworks activities and contaminated land are addressed in the Cultural and Heritage SWOT.</i></p>		<p>the NESCS. While the proposal triggered Rule 10.1.1 relating to the erection of a dwelling on contaminated land, the SDP is overridden by regulation 10 of the NESCS.</p> <p>The relevant issues identified in the NES which relate to the excavation of soil on a contaminated site are:</p> <ul style="list-style-type: none"> <li>The type of contaminants present at the site (i.e. the Contaminant(s) of Concern);</li> <li>The location, nature and extent of the contamination;</li> <li>Methods for undertaking earthworks/site works;</li> <li>Proposed duration of the works; and</li> <li>The monitoring proposed to be undertaken.</li> </ul> <p>The proposal was found to be consistent with the 'Land and Soil' objectives and policies in that the land will be remediated to a high standard whilst ensuring adverse effects on health are avoided. Consent was approved subject to conditions requiring implementation with the approved Remediation Action Plan.</p>		
National Environmental Standard (NESCS) for Assessing and Managing Contaminants in Soil to Protect Human Health	High	<p>The NESCS provides a complete framework of rules that deal with assessing and managing contaminants in soil to protect human health on a nationally consistent basis.</p> <p>As such, the District Plan does not need to contain any independent or separate set of rules or assessment criteria. The Council is required to enforce the observance of the NESCS pursuant to section 44A(8) of the RMA.</p> <p>The Proposed District Plan may however include objectives and policies to support the NESCS rules framework.</p>	See RPS assessment above.	See RPS assessment above.	-	See RPS assessment above.
Selwyn 2031	Medium	<ul style="list-style-type: none"> <li>Strategic Direction 1.4 Compact Urban Form – minimising loss of productive farmland;</li> <li>Strategic Direction 5.1 Natural Connections – enhancing natural resources;</li> <li>Strategic Direction 5.2 Rural Context – maintaining rural character/landscapes/outlooks.</li> </ul>	While S2031 is focussed on providing high level strategic directions for managing growth across the district, it is recognised that there are specific directions that seek to minimise the loss of productive farmland (including versatile soils) through the promotion of a compact urban form.	N/A	N/A	<p>The S2031 Issues and Actions relating to the Land &amp; Soil will be of relevance when identifying the significant resource management issues under the DPR.</p> <p>S2031 is an endorsement of the strategic planning approach adopted by SDC in recent years (as opposed to developer led), which should influence the strategic direction of the 2nd generation plan framework – Refer to RMA SWOT above.</p>

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Structure Plans/Area Plans/Rural Residential Strategy	Medium	<ul style="list-style-type: none"> <li>Lincoln Structure Plan – growth constrained by soil type and structure, relating to both stormwater infiltration capacity and presence of 'versatile' soils.</li> <li>Rural Residential Strategy – one of the urban consolidation principles underpinning the RRS is to minimise adverse effects on water quality and versatile soils through selective restraint on peripheral development.</li> </ul>				
Mahaanui Iwi Management Plan (2013)	Medium	<p><u>Soil Conservation</u></p> <ul style="list-style-type: none"> <li>P9.1 To sustain and safeguard the life supporting capacity of soils, mō tātou, ā, mō kā uri ā muri ake nei.</li> <li>P9.2 To require the appropriate valuation of soil resources as taonga and as natural capital, providing essential ecosystem services.</li> <li>P9.3 To protect the land from induced soil erosion as a result of unsustainable land use and development.</li> <li>P9.4 To support the following methods and measures to maintain or improve soil organic matter and soil nutrient balance, and prevent soil erosion and soil contamination...</li> </ul> <p><u>Contaminated Land</u></p> <ul style="list-style-type: none"> <li>P10.1 The management of contaminated land must recognise and provide for specific cultural issues...</li> <li>P10.2 To require appropriate and meaningful information sharing between management agencies and tāngata whenua on issues associated with contaminated sites.</li> <li>P10.3 To require investigation and monitoring of closed landfill sites to determine: <ul style="list-style-type: none"> <li>(a) Whether the site is a contaminated site; and</li> <li>(b) The level of environmental risk to groundwater and soil from leaching of contaminants.</li> </ul> </li> <li>P10.4 To require that remedial work is undertaken at closed landfill sites where leaching of contaminants is occurring, to prevent contamination of groundwater, waterways, and coastal waters.</li> </ul> <p><u>Earthworks</u></p>	See RPS assessment above.	See RPS assessment above.	See SWOT undertaken by Mahaanui Kurataiao Ltd (search by key word 'earthworks' in both Rural and Township Volume assessments, as well as the 'Summary report for SWOT' analysis).	<p>The SDP is not particularly strong in recognising cultural values and delivering the outcomes expressed in the IMP as it relates to the management of Land and Soil resources.</p> <p>There are examples of where rules seek to recognise and protect Sites of Significance to Tangata Whenua from the effects of Earthworks, Temporary Military Activities and Subdivision, although these are predominantly related to nuisance effects. Some of the outcomes expressed in Section 5.4 of the IMP are addressed in other sections of the SDP and will be evaluated through other SWOT topics. There are some examples of ODP's (Prebbleton LZ), subdivision assessment matters (L3), dAP Implementation Steps and S2031 Actions that seek to recognise, protect and enhance Tangata Whenua values, which should be developed further in the 2nd Generation Plan.</p> <p>There is a weakness in respect to the SDP aligning with the s2 definitions, particularly in respect to recognising the cultural attributes of people's appreciation of a locations "amenity" and the cultural conditions that contribute to what constitutes the "environment".</p> <p>Phase 2 of the DPR will need to investigate opportunities to further protect sites of significance, incorporate Tangata Whenua values in urban design and subdivision outcomes and to promote more suitable land development practices and sustainable resource management initiatives. Any review and evaluation of issues and options need to be advanced in partnership with Nga Rununga, with appropriate forums established to facilitate this active engagement.</p>

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		<ul style="list-style-type: none"> <li>○ P11.1 To assess proposals for earthworks with particular regard to: <ul style="list-style-type: none"> <li>(a) Potential effects on wāhi tapu and wāhi taonga, known and unknown;</li> <li>(b) Potential effects on waterways, wetlands and waipuna;</li> <li>(c) Potential effects on indigenous biodiversity;</li> <li>(d) Potential effects on natural landforms and features, including ridge lines;</li> <li>(e) Proposed erosion and sediment control measures; and</li> <li>(f) Rehabilitation and remediation plans following earthworks.</li> </ul> </li> <li>○ Policies P11.2-P11.6 'Risk of damage of modification to sites of significance'.</li> </ul> <p><i>(It is noted that these policies refer to cultural impacts, rather than soil quality)</i></p> <ul style="list-style-type: none"> <li>○ Policies P11.7 &amp; P11.8 'Indigenous vegetation'.</li> </ul> <p><i>(It is noted that these policies refer to the replacement and/or planting of indigenous vegetation, rather than soil quality)</i></p> <ul style="list-style-type: none"> <li>○ P11.9 'Erosion and sediment control'</li> </ul> <p>To require stringent and enforceable controls on land use and earthworks activities as part of the resource consent process, to protect waterways and waterbodies from sedimentation...</p>				
Partially Operative Canterbury Land & Water Regional Plan	Medium	<ul style="list-style-type: none"> <li>○ Objective 3.1: Land and water are managed as integrated natural resources to recognise and enable of Ngāi Tahu culture, and traditions, customary uses and relationships with land and water.</li> <li>○ Objective 3.2: Water management applies the ethic of ki uta ki tai – from the mountains to the sea – and land and water are managed as integrated natural resources recognising the connectivity between surface water and groundwater, and between fresh water, land and the coast.</li> <li>○ Objective 3.21: The diversion of water, erection, placement or failure of structures, the removal of gravel or other alteration of the bed of a lake or river or the removal of vegetation or natural defences</li> </ul>	See RPS assessment above.	See RPS assessment above.	See email response from Ecan re: overlap with regional rules (dated 1/08/2016)	See RPS assessment above.

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		<p>against water does not exacerbate the risk of flooding or erosion of land or damage to structures.</p> <ul style="list-style-type: none"><li>○ Objective 3.23: Soils are healthy and productive, and human-induced erosion and contamination are minimised.</li><li>○ Supporting policies and regional rules manage:<ul style="list-style-type: none"><li>➤ Earthworks, land excavation and deposition of material into land over aquifers, within wetlands and within the beds or margins of lakes or rivers;</li><li>➤ Earthworks and vegetation clearance in riparian areas and in erosion-prone areas;</li><li>➤ Soil stability;</li><li>➤ Hazardous substances and hazardous activities.</li></ul></li></ul>				