

Before an Independent Hearings Panel  
at Waimakariri District Council

*under:* the Resource Management Act 1991

*in the matter of:* **Proposed Private Plan Change RCP31 to the Operative Waimakariri District Plan**

between: **Rolleston Industrial Holdings Limited**  
*Applicant*

and: **Waimakariri District Council**  
*Consent Authority*

## Joint witness statement in relation to development constraints

Dated: 17 August 2023

## INTRODUCTION

- 1 This Joint Witness Statement ('JWS') records the outcome of conferencing of the planning expert witnesses in relation to the development constraints identified and discussed in the evidence in chief of Mr Walsh. The witnesses that prepared this JWS are:
  - (a) Mr Timothy Walsh – representing the Applicant
  - (b) Mr Andrew Willis – representing Waimakariri District Council
  - (c) Mr Nick Boyes – representing the Waimakariri District Council as a submitter
  - (d) Ms Joanne Mitten – representing the Canterbury Regional Council

## DIRECTION FROM THE PANEL

- 2 To assist in understanding the difference between development constraints underpinned by policy as opposed to evidential constraints, the Panel directed Mr Walsh to provide a revised set of constraint maps separating policy constraints from matters of evidence. The revised maps were then to be provided to the planning expert witnesses for discussion. The witnesses were directed to provide a joint witness statement identifying the agreed constraints to urban development, and those that are wholly or partly in dispute, and the reasons for any dispute.
- 3 Prior to conferencing, Mr Walsh verbally indicated to the Panel his view that all the identified development constraints were underpinned by policy. Therefore, the original set of maps were provided to the witnesses with one change made, which was the addition of the operative Christchurch Airport Noise Contour to the 'Noise Contour' constraint map.

## CONFERENCING

- 4 The witnesses briefly discussed the constraint maps during a break in the hearing and subsequently continued the discussion by email. A document (**attached**) has been prepared that provides the source of the constraint layers indicated on the maps along with relevant legislation and policy references. The document, which has been agreed by the witnesses, also contains commentary detailing areas of dispute and the reasons for the dispute.
- 5 It should be noted that no attempt was made to determine the weighting or significance to urban growth and development of each

constraint and that commentary on this is contained in Mr Walsh's evidence and Mr Willis's Summary Statement of Evidence.

- 6 The witnesses agree that there are explicit policy references relating to the following development constraints:
  - 6.1 Rangiora Airfield Noise Contour
  - 6.2 Christchurch Airport Noise Contour
  - 6.3 Liquefaction
  - 6.4 Coastal inundation
  - 6.5 Flooding
  - 6.6 Versatile soils
  - 6.7 Reserves / open space zones
  - 6.8 Sites of Significance to Māori (but not Māori Reserve 873 and/or the Special Purpose Zone Kainga Nohoanga).
- 7 The witnesses also agree that while there are no explicit policy references to the Speedway Noise Avoidance Contour, there is general policy support relating to it.
- 8 The witnesses agree that there is no policy reference to the tsunami evacuation zones.
- 9 There is some dispute in relation to:
  - 9.1 The application of the CRPS exemption for urban development beneath the Christchurch Airport Noise Contour at Kaiapoi
  - 9.2 The application of the remodelled 2023 Christchurch Airport Noise Contour
  - 9.3 Whether the Proposed Waimakariri District Plan Special Purpose Zone Kainga Nohoanga represents a development constraint.

Dated: 17 August 2023



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Timothy Walsh



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Andrew Willis



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Nick Boyes



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Joanne Mitten

# ATTACHEMENT

## PLANNING CONFERENCING – DEVELOPMENT CONSTRAINTS

The following provides details of the development constraints identified and discussed in Mr Walsh's planning evidence in chief (see paragraphs 51-85). For each development constraint, the source of the data is identified along with any legislation and/or policy that underpins the constraint. It is noted that certain constraints may be able to be negotiated by way of mitigation depending on the nature of the land in question and the specifics of the constraint at that location.

**No attempt is made to determine the weighting or significance to urban growth and development of each constraint. However:**

- **it is noted in this report whether the identified constraints have an associated explicit policy reference versus simply a more general management constraint; and**
- **both Mr Walsh and Mr Willis (Summary Statement of Evidence) have commented on the weighting of each constraint in their evidence before the Panel and it should be noted that there remains disagreement between Mr Walsh and Mr Willis on this.**

It is noted that the provided constraints are not exhaustive and that other potential constraints, such as ready access to public transport and Council services, absence of existing and planned infrastructure, land fragmentation, and restrictive covenants are not provided as part of this exercise.

Shaded text is taken directly from the Resource Management Act 1991, the Canterbury Regional Policy Statement ('CRPS'), the Operative Waimakariri District Plan ('District Plan'), or the Proposed Waimakariri District Plan ('Proposed Plan').

## NOISE

### ***Source of constraint layer***

- Proposed Plan: Speedway Noise Avoidance Contour
- Proposed Plan: Rangiora Airport Noise Avoidance Contour
- CRPS: 50dBA Ldn airport noise contour for Christchurch International Airport as indicated on Map A
- CIAL combined 50dBA Ldn airport noise contour for Christchurch International Airport as published by CIAL in May 2023 (digitised from the Marshall Day report) which was subsequently confirmed by the Canterbury Regional Council peer review in June 2023.

The Christchurch International Airport noise contour indicated on Map A and the remodelled version are calculated in a substantially similar way. The larger extent of the revised contour reflects an additional aircraft approach, a greater proportion of wide body aircraft movements (which are noisier than narrow body aircraft) and a higher volume of aircraft traffic.

While there are no explicit policy references to the Speedway Noise Avoidance Contour, there is general policy support relating to it, and residential units are non-complying within the speedway contour. There are explicit policy references to the management of activities under

the Rangiora Airfield Noise Contour and the Christchurch Airport Noise Contour. However, please note the following:

- Mr Willis, Mr Boyes and Ms Mitten consider the Kaiapoi Future Development Areas (and other parts of Kaiapoi), are expressly excluded from the application of the Christchurch Airport Noise Contour in the CRPS by virtue of the three exclusions in Policy 6.3.5(4), which exclude development in an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A;
- Mr Walsh acknowledges the exemption but is uncertain as to whether it applies to Kaiapoi in totality, particularly the Future Development Areas. The 'principal reasons and explanation' for Policy 6.3.5 notes:

The only exception to the restriction against residential development within the 50dBA Ldn airport noise contour is provided for at Kaiapoi.

Within Kaiapoi land within the 50dBA Ldn airport noise contour has been provided to offset the displacement of residences as a result of the 2010/2011 earthquakes. This exception is unique to Kaiapoi and also allows for a contiguous and consolidated development of Kaiapoi.

Mr Walsh considers that it is arguable the exemption applies to "land" that "has been provided to offset" displaced residences. If that were the case, the exemption may not apply to the Kaiapoi Future Development Areas.

- Mr Willis and Ms Mitten also consider that the 2023 Christchurch Airport Noise Contour is not operative until the CRPS has undergone a Schedule 1 process, and therefore is currently not relevant to Plan Change 31. The process for review of Map A is set out in CRPS Policy 6.3.11 and includes references to airport noise contours. Neither Policy 6.3.11 nor its methods state that the contour can be changed without a formal process. Furthermore, if the contour changed but not the contour location on Map A this would cause confusion as there would be two inconsistent contours which both need to be given effect to. Finally, requiring a CRPS change is appropriate as if the contours were to change markedly, such that large swathes of Greater Christchurch were no longer able to be developed or intensified, this change should go through a notified plan change as the Greater Christchurch Council's and community may wish to modify Policy 6.3.5 and apply a different approach for airport noise.
- Mr Walsh is less certain than Mr Willis and Ms Mitten regarding the applicability of the 2023 Christchurch Airport Noise Contour. He notes the wording of Policy 6.3.5(4) where there is no reference to the contour shown on Map A. He considers that it is arguable that the policy is concerned about where aircraft noise over 50 dBA Ldn is experienced rather than where it is indicated on Map A. Mr Walsh understands that the remodelled contour more accurately demonstrates the extent of aircraft noise over 50 dBA Ldn. The remodelled contour has been peer reviewed by an independent panel for Canterbury Regional Council in accordance with the monitoring and review process prescribed at Policy 6.3.11 of the CRPS. The peer review summary report required by Policy 6.3.11 Method 5 is now publicly available. As stated above, it is Mr Willis and Ms Mitten's view that the remodelled contour is not suitable for land use decisions until it has gone through a public process and is notified in the CRPS at the end of 2024.

## ***Legislation/Policy rationale - Aircraft Noise***

### **Resource Management Act 1991**

#### *s7 Other matters*

...all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

...

(c) the maintenance and enhancement of amenity values:

...

### **Canterbury Regional Policy Statement**

#### *Policy 6.3.5 Integration of land use and infrastructure*

...

4. Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by avoiding noise sensitive activities within the 50dBA Ldn airport noise contour for Christchurch International Airport, unless the activity is within an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A (page 6-28) and enabling commercial film or video production activities within the noise contours as a compatible use of this land;

...

### **Operative Waimakariri District Plan**

#### *Policy 12.1.1.12*

Avoid the noise effect from aircraft and avoid or mitigate the noise effect from road traffic in the receiving environment.

### **Proposed Waimakariri District Plan**

#### *Objectives*

##### *NOISE-O1 Adverse noise effects*

Noise does not adversely affect human health, communities, natural values and the anticipated amenity values of the receiving environment.

##### *NOISE-O2 Reverse sensitivity*

The operation of regionally significant infrastructure and strategic infrastructure, activities within Commercial and Mixed Use Zones and Industrial Zones and identified existing activities are not adversely affected by reverse sensitivity effects from noise sensitive activities.

*NOISE-O3 Rangiora Airfield*

The avoidance of noise sensitive activities within the 65dBA and 55dBA Ldn Noise Contours for Rangiora Airfield.

*Policies**NOISE-P1 Minimising adverse noise effects*

Minimise adverse noise effects by:

...

3. requiring sound insulation, or limiting the location of noise sensitive activities where they may be exposed to noise from existing activities.

**Legislation/Policy rationale – Speedway Noise****Resource Management Act 1991***s7 Other matters*

... all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

...

(c) the maintenance and enhancement of amenity values:

...

**Operative Waimakariri District Plan***Policy 12.1.1.11*

Avoid noise adversely affecting the amenity values and health and safety of people on neighbouring sites or zones.

**Proposed Waimakariri District Plan***Objectives**NOISE-O1 Adverse noise effects*

Noise does not adversely affect human health, communities, natural values and the anticipated amenity values of the receiving environment.

*NOISE-O2 Reverse sensitivity*

The operation of regionally significant infrastructure and strategic infrastructure, activities within Commercial and Mixed Use Zones and Industrial Zones and identified existing activities are not adversely affected by reverse sensitivity effects from noise sensitive activities.



### *Policies*

#### *NOISE-P1 Minimising adverse noise effects*

Minimise adverse noise effects by:

...

3. requiring sound insulation, or limiting the location of noise sensitive activities where they may be exposed to noise from existing activities.

## **LIQUEFACTION**

### ***Source of constraint layer***

Proposed Plan: Liquefaction damage is possible.

This was informed by the Eastern Canterbury Liquefaction Susceptibility Study (2012).

There are explicit policy references to liquefaction hazard management.

### ***Legislation/Policy rationale***

#### **Resource Management Act 1991**

##### *s6 Matters of national importance*

... recognise and provide for the following matters of national importance...

...

(h) the management of significant risks from natural hazards

...

##### *s31 Functions of territorial authorities under this Act*

(1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:

...

(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—

(i) the avoidance or mitigation of natural hazards

...

##### *s62 Contents of regional policy statements*

(1) A regional policy statement must state—

...

(i) the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land—

(i) to avoid or mitigate natural hazards or any group of hazards;

...

*s106 Consent authority may refuse subdivision consent in certain circumstances*

(1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—

(a) there is a significant risk from natural hazards

...

(1A) For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—

(a) the likelihood of natural hazards occurring (whether individually or in combination); and

(b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and

(c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

...

## **Canterbury Regional Policy Statement**

*Objective 11.2.1 Avoid new subdivision, use and development of land that increases risks associated with natural hazard*

*Objective 11.2.2 Adverse effects from hazard mitigation are avoided or mitigated*

*Policy 11.3.3 Earthquake hazards*

New subdivision, use and development of land on or close to an active earthquake fault trace, or in areas susceptible to liquefaction and lateral spreading, shall be managed in order to avoid or mitigate the adverse effects of fault rupture, liquefaction and lateral spreading.

### **11.4 ANTICIPATED ENVIRONMENTAL RESULTS**

1. Inappropriate development, such as residential or industrial development, is not located in areas where natural hazards are most likely to occur.

2. Where development must occur in areas subject to natural hazards, the potential adverse effects of those natural hazards are mitigated or managed by appropriate design and placement of structures and facilities.

3. Communities are increasingly resilient to natural hazard events.
4. Hazard mitigation works do not adversely affect the environment

### **Operative Waimakariri District Plan**

#### *Objective 8.3.1*

Increase Council and community understanding of the earthquake risk and associated natural hazard.

#### *Policy 8.3.1.1*

Identify areas which are at risk from liquefaction, associated ground damage effects, and amplified ground shaking.

#### *Anticipated Environmental Result*

...

Increased awareness of potential natural events, including seismic

...

### **Proposed Waimakariri District Plan**

#### *Objectives*

#### *NH-O1 Risk from natural hazards*

New subdivision, land use and development:

1. manages natural hazard risk, including coastal hazards, in the existing urban environment to ensure that any increased risk to people and property is low;
2. is avoided in the Ashley Fault Avoidance Overlay and high hazard areas for flooding outside of the urban environment where the risk to life and property are unacceptable; and
3. outside of the urban environment, is undertaken to ensure natural hazard risk, including coastal hazard risk, to people and property is avoided or mitigated and the ability of communities to recover from natural hazard events is not reduced.

#### *Policies*

#### *NH-P1 Identification of natural hazards and a risk-based approach*

Identify natural hazards, including coastal hazards, through the use of overlays and assess the risk for the management of subdivision, use and development within the overlays based on:

1. the sensitivity of the building occupation to loss of life, damage to property from a natural hazard and the ability for communities to recover after a natural hazard event; and

2. the level of hazard presented to people and property from a natural hazard, recognising that climate change will alter the frequency and severity of some natural hazard events.

*NH-P6 Subdivision within the Liquefaction Hazard Overlay*

Manage subdivision within the Liquefaction Hazard Overlay to ensure that the risk to life and property is low.

## **FLOODING & COASTAL INUNDATION**

### ***Source of constraint layer***

All 1:200-year flood events Medium and High Flood Hazard – Waimakariri District Council Flood Hazard Modelling.

There are explicit policy references to flooding and coastal inundation hazard management.

### ***Legislation/Policy rationale***

#### **Resource Management Act 1991**

*s6 Matters of national importance*

...recognise and provide for the following matters of national importance...

...

(h) the management of significant risks from natural hazards

...

*s31 Functions of territorial authorities under this Act*

(1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:

...

(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—

(i) the avoidance or mitigation of natural hazards

...

*s62 Contents of regional policy statements*

(1) A regional policy statement must state—

...

(i) the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land—

(i) to avoid or mitigate natural hazards or any group of hazards;

...

*s106 Consent authority may refuse subdivision consent in certain circumstances*

(1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—

(a) there is a significant risk from natural hazards

...

(1A) For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—

(a) the likelihood of natural hazards occurring (whether individually or in combination); and

(b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and

(c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

...

## **Canterbury Regional Policy Statement**

*Objective 11.2.1 Avoid new subdivision, use and development of land that increases risks associated with natural hazard*

*Objective 11.2.2 Adverse effects from hazard mitigation are avoided or mitigated*

*Policy 11.3.1 Avoidance of inappropriate development in high hazard areas*

To avoid new subdivision, use and development (except as provided for in Policy 11.3.4) of land in high hazard areas, unless the subdivision, use or development:

1. is not likely to result in loss of life or serious injuries in the event of a natural hazard occurrence; and

2. is not likely to suffer significant damage or loss in the event of a natural hazard occurrence; and

3. is not likely to require new or upgraded hazard mitigation works to mitigate or avoid the natural hazard; and

4. is not likely to exacerbate the effects of the natural hazard; or

...

6. Within greater Christchurch, is proposed to be located in an area zoned in a district plan for urban residential, industrial or commercial use, or identified as a "Greenfield Priority Area" on Map A of Chapter 6, both at the date the Land Use Recovery Plan was notified in the Gazette, in which the effect of the natural hazard must be avoided or appropriately mitigated; or

...

*Policy 11.3.2 Avoid development in areas subject to inundation*

In areas not subject to Policy 11.3.1 that are subject to inundation by a 0.5% AEP flood event; any new subdivision, use and development (excluding critical infrastructure) shall be avoided unless there is no increased risk to life, and the subdivision, use or development:

1. is of a type that is not likely to suffer material damage in an inundation event; or
2. is ancillary or incidental to the main development; or
3. meets all of the following criteria:

a. new buildings have an appropriate floor level above the 0.5% AEP design flood level; and

b. hazardous substances will not be inundated during a 0.5% AEP flood event;

provided that a higher standard of management of inundation hazard events may be adopted where local catchment conditions warrant (as determined by a cost/benefit assessment).

When determining areas subject to inundation, climate change projections including sea level rise are to be taken into account

**11.4 ANTICIPATED ENVIRONMENTAL RESULTS**

1. Inappropriate development, such as residential or industrial development, is not located in areas where natural hazards are most likely to occur.
2. Where development must occur in areas subject to natural hazards, the potential adverse effects of those natural hazards are mitigated or managed by appropriate design and placement of structures and facilities.
3. Communities are increasingly resilient to natural hazard events.
4. Hazard mitigation works do not adversely affect the environment

**Operative Waimakariri District Plan**

*Objective 8.1.1*

The community's understanding of natural hazards and its behaviour prior to, during, and after natural events avoids or mitigates natural hazards to an accepted level.

*Policy 8.1.1.1*

Provide information to enable people to take appropriate precautions in relation to natural events.

*Policy 8.1.1.2*

Give specific consideration to the consequences when emergencies or disasters actually occur and ways to maximise personal safety and minimise material loss.

*Objective 8.2.1*

The community's desired level of protection from flood events is achieved through an appropriate combination of measures to modify the level of flooding, modify susceptibility to damage and deal with the consequences of floods.

*Policy 8.2.1.1*

Identify areas of land known to be at risk from flooding or which have a known history of flooding.

*Policy 8.2.1.2*

In areas identified in the District Plan as having a history of localised flooding, and in areas adjacent to water bodies, give specific consideration to the consequences and probability of flooding at the time of subdivision or land use consent, to avoid or mitigate a flood hazard.

*Policy 8.2.1.3*

Avoid floodwaters entering residential, commercial and industrial buildings.

*Policy 8.2.1.4*

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.

*Anticipated Environmental Result*

- Development in areas with a known risk of flooding takes into account historical events so that design and siting of structures mitigates the flood hazard and floodwaters do not enter residential buildings
- Increased awareness of potential natural events, including seismic
- Current level of flood protection from works and services is maintained or enhanced
- Natural hazards are mitigated by the precautions taken by and on behalf of the community and appropriate actions during and after an event

**Proposed Waimakariri District Plan**

*Objectives*

*NH-O1 Risk from natural hazards*

New subdivision, land use and development:

4. manages natural hazard risk, including coastal hazards, in the existing urban environment to ensure that any increased risk to people and property is low;
5. is avoided in the Ashley Fault Avoidance Overlay and high hazard areas for flooding outside of the urban environment where the risk to life and property are unacceptable; and
6. outside of the urban environment, is undertaken to ensure natural hazard risk, including coastal hazard risk, to people and property is avoided or mitigated and the ability of communities to recover from natural hazard events is not reduced.

## *Policies*

### *NH-P1 Identification of natural hazards and a risk-based approach*

Identify natural hazards, including coastal hazards, through the use of overlays and assess the risk for the management of subdivision, use and development within the overlays based on:

3. the sensitivity of the building occupation to loss of life, damage to property from a natural hazard and the ability for communities to recover after a natural hazard event; and
4. the level of hazard presented to people and property from a natural hazard, recognising that climate change will alter the frequency and severity of some natural hazard events.

### *NH-P2 Activities in high hazard areas for flooding within urban areas*

Manage subdivision, use and development for natural hazard sensitive activities within high flood hazard and high coastal flood hazard urban environments to ensure that:

1. minimum floor levels are incorporated into the design of development to ensure the risk to life and potential for building damage from flooding is mitigated; and
2. the risk to surrounding properties is not significantly increased and the net flood storage capacity is not reduced; and
3. the conveyance of flood waters is not impeded; or
4. the nature of the activity means the risk to life and potential for building damage from flooding is low.

### *NH-P3 Activities in high hazard areas for flooding outside of urban areas*

Avoid subdivision, use and development for natural hazard sensitive activities outside urban environments in high flood hazard and high coastal flood hazard urban environments unless:

1. the activity incorporates mitigation measures so that the risk to life, and building damage is low;
2. the risk from flooding to surrounding properties is not significantly increased;
3. the conveyance of flood waters is not impeded; and
4. the activity does not require new or upgraded community scale natural hazard mitigation works.

### *NH-P4 Activities outside of high hazard areas for flooding*



Provide for subdivision, use and development associated with natural hazard sensitive activities outside of high flood hazard and high coastal flood hazard urban environments where it can be demonstrated that:

1. the nature of the activity means the risk to life and potential for building damage from flooding is low; or
2. minimum floor levels are incorporated into the design of development to ensure building floor levels are located above the flood level so that the risk to life and potential for building damage from flooding is avoided; and
3. the risk from flooding to surrounding properties is not significantly increased and the net flood storage capacity is not reduced; and
4. the ability for the conveyancing of flood waters is not impeded.

*NH-P11 New below ground infrastructure and upgrading of infrastructure outside of high hazard areas*

Provide for new and upgrading of existing below ground infrastructure outside of high flood hazard and high coastal flood hazard areas, where:

1. if located within a flood assessment or coastal flood assessment overlay, the original ground level is reinstated at completion of the works;
2. it does not increase the risk to life or property from natural hazard events;
3. it does not result in a reduction in the ability of people and communities to recover from a natural hazard event; and
4. it is designed to maintain reasonable and safe operation during and after a natural hazard event.

*NH-P12 New below ground infrastructure and upgrading of infrastructure within high flood hazard areas*

Provide for the installation of new and upgrading of existing below ground infrastructure in high flood hazard or high coastal flood hazard areas where:

1. the infrastructure does not exacerbate the natural hazard risk or transfer the risk to another site;
2. the conveyance of flood waters is not impeded;
3. there is a functional need or operational need for the infrastructure to be located in a high flood hazard or high coastal flood hazard area and there are no practical alternatives; and
4. the location and design of the infrastructure address relevant natural hazard risk and appropriate measures have been incorporated into the design to provide for the continued operation.

*NH-P13 New above ground critical infrastructure and upgrading of critical infrastructure within high flood hazard areas*

Only allow for the new and upgrading of existing above ground critical infrastructure in high flood hazard or high coastal flood hazard areas where:

1. there is a functional need or operational need for that location and there are no practical alternatives;
2. the location and design of the infrastructure address relevant natural hazard risk and appropriate measures have been incorporated into the design to provide for the continued operation; and
3. the infrastructure does not exacerbate the natural hazard risk or transfer the risk to another site.

*NH-P16 Redevelopment and relocation in coastal hazard and natural hazard overlays*

Encourage redevelopment, or changes in land use where that would reduce the risk of adverse effects from natural hazards, including managed retreat and designing for relocation or recoverability from natural hazard events.

*NH-P17 Hard engineering natural hazard mitigation within the coastal environment*

Only allow hard engineering natural hazard mitigation within the coastal environment that reduces the risk of natural hazards when:

1. soft engineering measures would not provide an appropriate level of protection and it can be demonstrated that there are no other reasonable alternatives;
2. the construction of hard engineering measures will not increase the risk from coastal hazards on adjacent properties that are not protected by the hard engineering measures;
3. where managed retreat has not been adopted and there is an immediate risk to life or property from the natural hazard;
4. it avoids the modification or alteration of natural defences and systems in a way that would compromise their function as natural defences; and
5. significant adverse effects on natural defences and systems from those measures are avoided, and any other adverse effects are avoided, remedied or mitigated.

## **TSUNAMI**

### ***Source of constraint layer***

Canterbury Tsunami Evacuation Zones – Yellow, Orange and Red zones as published by the Canterbury Regional Council.

- Yellow = area could be affected by a very large tsunami.
- Orange = area could be affected by a large tsunami
- Red = area could be affected even by a small tsunami. It typically covers beach and marine areas and is the most likely area to be evacuated in a tsunami event.

The objectives/policies of the CRPS, District Plan and Proposed Plan do not directly reference Canterbury Tsunami Evacuation Zones. The District Plan and Proposed Plan policies do not directly cover tsunami as a natural hazard to be managed.

For the Proposed Plan, Mr Willis and Ms Mitten note Canterbury Regional Council advice that the available tsunami modelling is not sufficiently robust to use for district plan purposes,

hence its application for evacuation zones only, as opposed to urban growth management in the Proposed Plan.

## ***Legislation/Policy rationale***

### **Resource Management Act 1991**

#### *s6 Matters of national importance*

...recognise and provide for the following matters of national importance...

...

(h) the management of significant risks from natural hazards

...

#### *s31 Functions of territorial authorities under this Act*

(1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:

...

(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—

(i) the avoidance or mitigation of natural hazards

...

#### *s62 Contents of regional policy statements*

(1) A regional policy statement must state—

...

(i) the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land—

(i) to avoid or mitigate natural hazards or any group of hazards;

...

#### *s106 Consent authority may refuse subdivision consent in certain circumstances*

(1) A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—

(a) there is a significant risk from natural hazards

...

(1A) For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—

(a) the likelihood of natural hazards occurring (whether individually or in combination); and

(b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and

(c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

...

## **Canterbury Regional Policy Statement**

*Objective 11.2.1 Avoid new subdivision, use and development of land that increases risks associated with natural hazard*

*Objective 11.2.2 Adverse effects from hazard mitigation are avoided or mitigated*

*Policy 11.3.5 General risk management approach*

For natural hazards and/or areas not addressed by policies 11.3.1, 11.3.2, and 11.3.3, subdivision, use or development of land shall be avoided if the risk from natural hazards is unacceptable. When determining whether risk is unacceptable, the following matters will be considered:

1. the likelihood of the natural hazard event; and
2. the potential consequence of the natural hazard event for: people and communities, property and infrastructure and the environment, and the emergency response organisations.

Where there is uncertainty in the likelihood or consequences of a natural hazard event, the local authority shall adopt a precautionary approach.

Formal risk management techniques should be used, such as the Risk Management Standard (AS/NZS ISO 31000:2009) or the Structural Design Action Standard (AS/NZS 1170.0:2002)

### **11.4 ANTICIPATED ENVIRONMENTAL RESULTS**

1. Inappropriate development, such as residential or industrial development, is not located in areas where natural hazards are most likely to occur.
2. Where development must occur in areas subject to natural hazards, the potential adverse effects of those natural hazards are mitigated or managed by appropriate design and placement of structures and facilities.
3. Communities are increasingly resilient to natural hazard events.
4. Hazard mitigation works do not adversely affect the environment

## Operative Waimakariri District Plan

### *Objective 8.1.1*

The community's understanding of natural hazards and its behaviour prior to, during, and after natural events avoids or mitigates natural hazards to an accepted level.

#### *Policy 8.1.1.1*

Provide information to enable people to take appropriate precautions in relation to natural events.

#### *Policy 8.1.1.2*

Give specific consideration to the consequences when emergencies or disasters actually occur and ways to maximise personal safety and minimise material loss.

### *Objective 8.2.1*

The community's desired level of protection from flood events is achieved through an appropriate combination of measures to modify the level of flooding, modify susceptibility to damage and deal with the consequences of floods.

#### *Policy 8.2.1.1*

Identify areas of land known to be at risk from flooding or which have a known history of flooding.

#### *Policy 8.2.1.2*

In areas identified in the District Plan as having a history of localised flooding, and in areas adjacent to water bodies, give specific consideration to the consequences and probability of flooding at the time of subdivision or land use consent, to avoid or mitigate a flood hazard.

#### *Policy 8.2.1.3*

Avoid floodwaters entering residential, commercial and industrial buildings.

#### *Policy 8.2.1.4*

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.

### *Anticipated Environmental Result*

- Development in areas with a known risk of flooding takes into account historical events so that design and siting of structures mitigates the flood hazard and floodwaters do not enter residential buildings
- Increased awareness of potential natural events, including seismic
- Current level of flood protection from works and services is maintained or enhanced
- Natural hazards are mitigated by the precautions taken by and on behalf of the community and appropriate actions during and after an event

## Proposed Waimakariri District Plan

### *Objectives*

#### *NH-O1 Risk from natural hazards*

New subdivision, land use and development:

1. manages natural hazard risk, including coastal hazards, in the existing urban environment to ensure that any increased risk to people and property is low;
2. is avoided in the Ashley Fault Avoidance Overlay and high hazard areas for flooding outside of the urban environment where the risk to life and property are unacceptable; and
3. outside of the urban environment, is undertaken to ensure natural hazard risk, including coastal hazard risk, to people and property is avoided or mitigated and the ability of communities to recover from natural hazard events is not reduced.

### *Policies*

#### *NH-P1 Identification of natural hazards and a risk-based approach*

Identify natural hazards, including coastal hazards, through the use of overlays and assess the risk for the management of subdivision, use and development within the overlays based on:

1. the sensitivity of the building occupation to loss of life, damage to property from a natural hazard and the ability for communities to recover after a natural hazard event; and
2. the level of hazard presented to people and property from a natural hazard, recognising that climate change will alter the frequency and severity of some natural hazard events.

#### *NH-P4 Activities outside of high hazard areas for flooding*

Provide for subdivision, use and development associated with natural hazard sensitive activities outside of high flood hazard and high coastal flood hazard urban environments where it can be demonstrated that:

1. the nature of the activity means the risk to life and potential for building damage from flooding is low; or
2. minimum floor levels are incorporated into the design of development to ensure building floor levels are located above the flood level so that the risk to life and potential for building damage from flooding is avoided; and
3. the risk from flooding to surrounding properties is not significantly increased and the net flood storage capacity is not reduced; and
4. the ability for the conveyancing of flood waters is not impeded.

#### *NH-P11 New below ground infrastructure and upgrading of infrastructure outside of high hazard areas*

Provide for new and upgrading of existing below ground infrastructure outside of high flood hazard and high coastal flood hazard areas, where:

1. if located within a flood assessment or coastal flood assessment overlay, the original ground level is reinstated at completion of the works;
2. it does not increase the risk to life or property from natural hazard events;
3. it does not result in a reduction in the ability of people and communities to recover from a natural hazard event; and
4. it is designed to maintain reasonable and safe operation during and after a natural hazard event.

*NH-P16 Redevelopment and relocation in coastal hazard and natural hazard overlays*

Encourage redevelopment, or changes in land use where that would reduce the risk of adverse effects from natural hazards, including managed retreat and designing for relocation or recoverability from natural hazard events.

*NH-P19 Other natural hazards*

Encourage the consideration of other natural hazards as part of subdivision, use and development.

## **VERSATILE SOILS**

### ***Source of constraint layer***

- Land Use Category 1, 2 and 3 soils within rural zoned land, excluding the Proposed Plan Rural Lifestyle Zone, as per the NPS-HPL.
- Land Use Category 1 and 2 soils elsewhere in recognition that these are versatile soils as defined in the CRPS.

There are explicit (District Wide) policy references to the management of versatile soils in the District Plan. The CRPS does not explicitly identify versatile soils as a policy constraint for the Greater Christchurch Area. However, Mr Willis and Ms Mitten consider that this reflects that the CRPS Chapter 6 seeks to avoid urban development within Greater Christchurch that is outside of the Greenfield Priority and Future Development Areas identified in Map A.

Further, Ms Mitten notes that Chapter 15 of the CRPS promotes the quality, life-supporting capacity and/or mauri of Canterbury's soils and their capability of providing for the community. Policy 15.3.1 that applies throughout the region, seeks to avoid, remedy or mitigate soil degradation and to promote land use practices that maintain and improve soil quality.

### ***Legislation/Policy rationale***

#### **Resource Management Act 1991**

... sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

...

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

...

### **Canterbury Regional Policy Statement**

*Objective 15.2.1- Maintenance of soil quality*

*Policy 15.3.1 Avoid remedy or mitigate soil degradation*

In relation to soil:

1. to ensure that land-uses and land management practices avoid significant long-term adverse effects on soil quality, and to remedy or mitigate significant soil degradation where it has occurred, or is occurring; and
2. to promote land-use practices that maintain and improve soil quality.

### **Operative Waimakariri District Plan**

*Objective 4.1.1*

Maintain and enhance the life-supporting capacity of the land resource in the District.

*Policy 4.1.1.6*

Where soils have been classified as versatile, promote land uses which safeguard the life supporting capacity of those soils and promote their availability for future uses.

## **RESERVES / PUBLIC OPEN SPACES**

### ***Source of constraint layer***

- Proposed Plan: Natural Open Space Zone
- Proposed Plan: Open Space Zone
- Proposed Plan: Sport and Active Recreation Zone

### ***Legislation/Policy rationale***

As per the description in the Proposed Plan, these zones are almost entirely comprised of public land to provide for open space and recreation areas to benefit the health and well-being of the people and communities of the district. Much of the proposed open space zoned land will be held under the Reserves Act 1977 and managed/preserved according to its purpose. Utility reserves are also included.

## **SITES OF SIGNIFICANCE TO MĀORI**

### ***Source of constraint layer***

- District Plan: Silent File Areas
- District Plan: Māori Reserve 873
- Proposed Plan: Special Purpose Zone Kainga Nohoanga



- Proposed Plan: Ngā Tūranga Tupuna Overlay

Mr Willis and Ms Mitten do not consider that Māori Reserve 873 and/or the Special Purpose Zone Kainga Nohoanga represents a constraint on development, and instead consider that it facilitates development. The rationale for why Mr Walsh considers the Proposed Plan Special Purpose Zone Kainga Nohoanga represents a development constraint is set out at paragraphs 68 to 72 in his evidence in chief.

## ***Legislation/Policy rationale***

### **Resource Management Act 1991**

#### *s6 Matters of national importance*

... recognise and provide for the following matters of national importance

...

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

...

### **Mahaanui – Iwi Management Plan 2013**

The Mahaanui Iwi Management Plan ('IMP') sets out Ngāi Tahu's issues, objectives, and policies for natural resource and environmental management within the area bounded by the Hurunui River in the north and the Ashburton River in the south. Under Section 74(2A) of the Act, a territorial authority must take into account any such plan to the extent that it has a bearing on the resource management issues of the district. The IMP is primarily a tool for the Rūnanga in the area it covers. The plan also provides guidance to territorial authorities and others.

Cultural sites are largely attributed to the IMP and Te Whakatau Kaupapa: Ngai Tahu resource management strategy for the Canterbury Region.

### **Canterbury Regional Policy Statement**

#### *Table 2.1 Summary of issues of significance to Ngāi Tahu relevant to the CRPS*

Historic heritage – Outcomes desired by Ngāi Tahu

Avoid adverse effects on wāhi tapu and other sites of cultural heritage value as a result of inappropriate land-use, subdivision and development.

Wāhi tapu and wāhi taonga are given appropriate value in decision-making processes.

Protection of all sites of significance, including those not registered as New Zealand Historic Places Trust or New Zealand Archaeological Association sites.

Provide for Ngāi Tahu access to sites of significance.

Ensure tikanga Māori is observed on wāhi tapu sites.

Improve communication between Ngāi Tahu and local authorities.

Enhance understanding of statutory and non-statutory tools and processes for managing discoveries of taonga, accidental or otherwise.

*Policy 5.3.4 Papakāinga housing and marae (Entire Region)*

To recognise that the following activities, when undertaken by tāngata whenua with mana whenua, are appropriate when they occur on their ancestral land in a manner that enhances their on-going relationship and culture and traditions with that land:

1. papakāinga housing;
2. marae; and
3. ancillary activities associated with the above;

...

## **Operative District Plan**

*Objective 2.1.3*

Recognition and protection of wahi taonga that is culturally, spiritually and/or physically important to Ngai Tuahuriri.

*Policy 2.1.3.1*

To identify wahi taonga recognised by Ngai Tuahuriri.

*Policy 2.1.3.2*

Avoid, remedy or mitigate adverse effects on the cultural and traditional values associated with wahi taonga identified in this District Plan.

*Policy 2.1.3.4*

Recognise the relationship of Ngai Tuahuriri with the land and associated resources in Maori Reserve 873 so as to enable the land to be used as intended by Kemps Deed of 1848 and the Crown Grants Act (No.2) of 1862, for places of residence and living activities for the original grantees and their descendants.

## **Proposed Waimakariri District Plan**

*Sites and areas of significance to Māori*

The Proposed Plan identifies sites and areas of cultural significance to Ngāi Tūāhuriri grouped into the following:

*wāhi tapu and wāhi taonga – are treasured places that include wāhi tapu, which are sites and places that are held in reverence due to their significance according to whakapapa (including urupā, pā, maunga tapu, kāinga, and tūranga waka). In addition to wāhi tapu, other places are treasured due to their high intrinsic values or*

*their capacity to sustain the quality of life and provide for the needs of present and future generations (including areas important to support ecosystems and sites related to food gathering and cultural resources);*

*ngā tūranga tūpuna – larger extents of land within which there is a concentration of wāhi tapu or taonga values, or which are of particular importance in relation to Ngāi Tūāhuriri cultural traditions, history or identity; and*

*ngā wai – is water and represents the essence of all life, is integral to tribal identity, and source of mahinga kai.*

## Objectives

### SASM-O1 Ngā tūtohu whenua

The historic and contemporary cultural significance for Ngāi Tūāhuriri mana whenua, of and their relationship with ancestral lands, water, sites, wāhi tapu, wāhi taonga and coastal environment is recognised and provided for.

### Policies SASM-P3

#### Wāhi tapu and wāhi taonga

Protect wāhi tapu and wāhi taonga sites from development, disturbance, damage or destruction that would adversely affect the sites and their values and provide for enhancement of cultural and ecological values.

### SASM-P4 Ngā tūranga tūpuna

Recognise the historic and contemporary relationship of Ngāi Tūāhuriri with the areas and landscapes identified as ngā tūranga tūpuna and:

1. facilitate opportunities to provide information about the historic occupation or use of these areas and their associated values by Ngāi Tūāhuriri;
2. provide opportunities for representation of Ngāi Tūāhuriri's association and relationship with these areas through the design of public buildings and/or community facilities;
3. manage earthworks involving disturbance of soils through the implementation of a Te Ngāi Tūāhuriri Rūnanga/Heritage New Zealand Pouhere Taonga authorised accidental discovery protocol and opportunity for cultural monitoring;
4. facilitate opportunities to enhance mahinga kai and other customary use of taonga species through planting and landscaping;
5. enhance the natural character and cultural values of waterbodies, repo/wetlands and coastal waters;
6. ensure that natural processes are maintained and original water courses reinstated where practicable, when undertaking earthworks or when structures and infrastructure are located adjacent to or over waterbodies or within the coastal environment;
7. maintain, restore or enhance natural features with cultural values within these areas, such as ngā reporepo (wetlands); and

8. provide opportunities for the recognition of culture values within the design, location and installation of infrastructure, while enabling their safe, secure and efficient installation.

#### SASM-P5 Ngā Wai

Recognise the cultural significance of the waterbodies, repo/wetlands and those parts of the coastal environment identified as Ngā Wai, and manage the effects of land uses, and activities on the surface of water, to:

1. protect the health of these waterbodies and associated coastal waters, including by maintaining their natural character where it is high and enabling enhancement where it is degraded, including through the reinstatement of original water courses where practicable;
2. recognise historic and contemporary Ngāi Tūāhuriri customary uses and values associated with these waterbodies and coastal waters and enhance opportunities for customary use and access;
3. ensure any land uses adjoining these sites, or structures and activities on the surface of water do not adversely affect taonga species or Ngāi Tūāhuriri customary uses in these areas;
4. ensure new land uses do not create an additional demand for the discharge of sewage or stormwater directly into Ngā Wai, and where the opportunity arises, reduce the need for existing land uses to discharge untreated wastewater or stormwater into these areas;
5. protect the health, natural functions and processes of riparian margins and the coastal environment from the adverse effects of adjoining land use activities; and
6. provide for opportunities for the recognition of cultural values within the design, location and installation of infrastructure, while enabling their safe, secure and efficient installation.