

CHRISTCHURCH DISTRICT PLAN

PLAN CHANGE 14

HOUSING AND BUSINESS CHOICE

**PLANNING OFFICER'S REPORT OF BRITTANY OLIVIA RATKA UNDER SECTION
42A OF THE RESOURCE MANAGEMENT ACT 1991**

**Qualifying matters relating to Industrial Interface, Significant and Other Trees, and Natural
Hazards**

11 August 2023

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LIST OF ABBREVIATIONS

the Act/RMA	Resource Management Act 1991
the plan change/PC14/ PPC14	Proposed Plan Change 14
the Plan/District Plan	Christchurch District Plan
QM	Qualifying Matter
FPMA	Flood Ponding Management Area
HFHMA	High Flood Hazard Management Area
QM trees	Trees proposed to be protected as Significant and Other QM trees
the Council	Christchurch City Council
PC12	Plan Change 12
Housing Supply Amendment Act	Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021
MDRS	Medium Density Residential Standards
NPS-UD	National Policy Statement – Urban Development 2020
IHP	Independent Hearings Panel
ISPP	Intensification Streamlined Planning Process
HRZ	High-density Residential Zone
MRZ	Medium Density Residential Zone
IH	Industrial Heavy
IHZ	Industrial Heavy Zone
HFHMA	High Flood Hazard Management Area
RUO	Residential Unit Overlay
FMA	Flood Management Area
RS	Residential Suburban
AES	Acoustic Engineering Services
GDP	Gross domestic product
CTEM	Christchurch Tree Evaluation Method
CSS	Construction Standard Specification
AIFR	Annual Individual Fatality Risk
OHRN	Ōpāwaho Heathcote River Network
CES	Canterbury Earthquake Sequence
TC	Technical category
LMA	Liquefaction Management Area
LVC	Liquefaction Vulnerability Category

1 EXECUTIVE SUMMARY

1.1.1 I have been asked by the Council to prepare this report pursuant to section 42A of the Resource Management Act 1991 (**the Act/RMA**). This report considers the issues raised by submissions to Council initiated Plan Change 14 – Housing and Business Choice (**the plan change / PC14 / PPC14**) to the operative Christchurch District Plan (**the Plan, District Plan**) and makes recommendations in response to the issues that have emerged from these submissions, as they apply to the following qualifying matters (**QMs**) proposed by the Council:

- a. The Industrial Interface QM.
- b. The Significant and Other Trees QM (including heritage trees and non-heritage trees) (**Trees QM**); and
- c. The Natural Hazards QMs (**Natural Hazards QMs**) comprising:
 - The High Flood Hazard Management Area (**HFHMA**) Qualifying Matter
 - The Flood Ponding Management Area (**FPMA**) Qualifying Matter
 - The Slope Instability QM (being the Cliff Collapse Management Area 1, Cliff Collapse Management Area 2 and Rockfall Management Area 1)

1.1.2 This report also addresses submissions seeking other/new Natural Hazards QMs. The Coastal Hazard Management Areas and Tsunami Management Area QMs are addressed in a separate s 42A report, the Strategic Directions report prepared by Sarah Oliver.

1.1.3 The Industrial Interface is not within the operative Plan. Significant and Other Trees are currently managed in the Plan, however the QM proposes amendments to the schedule and method of protecting trees. The Natural Hazard QMs are existing natural hazard areas identified and managed in the Plan, proposed to be carried over to PC14 as existing QMs.

1.1.4 This report relies on expert evidence which is outlined in section 2.2 below.

1.1.5 This report forms part of the Council's ongoing reporting obligations to consider the appropriateness of the proposed provisions; the benefits and costs of any policies, rules or other methods; and the issues raised in submissions on PC14.

1.1.6 A number of submissions were received for the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs. For the summary of submissions relating to these refer to Appendix A.

1.1.7 The main issues raised by the submitters relevant to this s 42A report are set out as follows:

a. Industrial Interface QM:

- Issue 1: Removal of QM
- Issue 2: More controls under QM
- Issue 3: Site and area specific changes to QM
- Issue 4: Specific changes to proposed QM provisions

b. Significant and Other Trees QM:

- Issue 1: Less controls under QM
- Issue 2: More controls under QM
- Issue 3: Site and area specific changes to QM

c. Natural Hazards QMs:

- Issue 1: Specific changes to proposed QM provisions
- Issue 2: Clarification of the Residential Unit Overlay (**RUO**) and Coastal Hazards QM
- Issue 3: More controls in areas at risk of flooding
- Issue 4: Site and area specific changes related to flooding
- Issue 5: Remove flooding overlay
- Issue 6: Include controls for areas susceptible to non-coastal erosion
- Issue 7: Include controls for liquefaction and earthquake risk
- Issue 8: Include overlay for rockfall protection structures within slope instability areas

1.1.8 This report addresses each of these key issues, as well as any other relevant issues raised in the submissions relating to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs.

1.1.9 Having considered the notified PC14 material, the submissions and further submissions received, the findings of the Council's expert advisors and the additional information provided by the Council since notification, I have evaluated the PC14 provisions relating to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs and provided recommendations and conclusions in this report. The PC14 provisions with my recommended amendments are included in Appendix B. These recommendations take into account all of the relevant matters raised in submissions and relevant statutory and non-statutory documents.

1.1.10 In accordance with the further evaluation undertaken under section 32AA of the RMA that has been included throughout this report, I consider that the provisions with recommended

amendments are the most appropriate way to achieve the objectives of the Plan as amended by PC14 and the purpose of the RMA.

2 INTRODUCTION

2.1 REPORTING OFFICER

2.1.1 My full name is Brittany Olivia Ratka. I am employed as a policy planner in the City Planning Team, Strategy and Transformation Group of the Christchurch City Council (the **Council**). I have been in this position since 16 December 2021.

2.1.2 I hold a Master of Planning degree with first class honors from Lincoln University. I hold a Bachelor of Science degree (double major in Geography and Psychology) from the University of Canterbury. I am also an intermediate member of the New Zealand Planning Institute.

2.1.3 I have over 6 years' experience in planning and resource management in New Zealand, having prior to my current policy planner role, worked as a resource consents planner for the Council between December 2016 – December 2021. I have worked on a wide range of complex resource consents and more recently have been involved in the Coastal Hazards Plan Change (**PC12**) which is yet to be notified, and PC14, including contributing to the Part 2 - Qualifying Matters s 32 report.

2.1.4 I am the principal author of the Part 2 Qualifying Matters s 32 report where it relates specifically to the Industrial Interface Qualifying Matter. I was not involved in the preparation of the Significant and Other Trees QM or the Natural Hazards QMs assessments in the report. In preparing this report, I confirm that I have read and considered the full s 32 report. Except where I say otherwise, I agree with the content and analysis set out in the Part 2 Qualifying Matters s 32 report. I rely on, and refer back to, that report, but do not intend to repeat its contents in order to minimise duplication. The Part 2 Qualifying Matters s 32 report, and all other s 32 reports including their appendices can be accessed from the Council's website¹.

2.1.5 I am the author of this s 42A report. My role in preparing this report is that of an expert planner.

2.1.6 I have been involved in the Christchurch City Council submission on PC14. In this report, I will not be considering or commenting on relief sought in the Council submission.

¹ <https://ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/plans/christchurch-district-plan/changes-to-the-district-plan/proposed-changes-to-the-district-plan/pc14/>

2.1.7 Although this is a Council-level process, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and I agree to comply with it. I confirm I have considered all the material facts I am aware of that might alter or detract from the opinions that I express. I confirm this evidence is within my area of expertise, except where I state I am relying on the evidence of another person.

2.1.8 I confirm that, while I am employed by the Council, the Council has agreed to me providing this evidence in accordance with the Code of Conduct.

2.2 THE PURPOSE AND SCOPE OF THIS REPORT

2.2.1 In response to the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (the **Housing Supply Amendment Act**), tier 1 territorial authorities were required to notify changes or variations to their district plans to incorporate the Medium Density Residential Standards (**MDRS**) and give effect to Policy 3 of the National Policy Statement – Urban Development 2020 (**NPS-UD**). PC14 is an Intensification Planning Instrument (IPI) under section 80E of the Resource Management Act 1991 (**RMA**).

2.2.2 As a tier 1 territorial authority the Council has established an Independent Hearings Panel (**IHP**) to hear submissions and make recommendations on PC14 using the Intensification Streamlined Planning Process (**ISPP**).

2.2.3 I have prepared this report in accordance with the ISPP and section 42A of the RMA for the purpose of:

- a. assisting the IHP in considering and making their recommendations on the issues raised by submissions and further submissions on Christchurch's IPI – PC14 - by presenting the key themes and associated issues in relation to the QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions of PC14 that require consideration by the IHP.
- b. identifying submissions related to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions of PC14, providing submitters with information on how their submissions have been evaluated and to make recommendations on the Industrial Interface QM provisions of PC14 and the submissions and further submissions received on it. Where I recommend substantive changes to the plan change provisions, I provide an assessment of those changes in terms of section 32AA of the RMA.

2.2.4 The scope of this s 42A report relates to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs. As noted above, the Coastal Hazards Management Area and Tsunami Management Area are addressed in the Strategic Overview s 42A report prepared by Sarah Oliver for the Council. The relevant existing and proposed Plan zones are as follows:

QM	Operative Plan Zone	PC14 Zone
Industrial Interface	N/A	Residential Suburban Residential Suburban Density Transition Medium Density Residential High-density Residential
Significant and Other Trees	Applies to all zones aside from the Transport Zone	Applies to all PC14 zones aside from the Transport Zone
Natural Hazards	Applies to all zones	Applies to all PC14 zones

2.2.5 This s 42A report:

- a. addresses the relevant contextual, procedural and statutory considerations and instruments (by reference to the section 42A 'Strategic Overview' report and the Part 2 – Qualifying Matters s 32 Report).
- b. discusses the relevant Plan Objectives and Policies as they relate specifically to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs;
- c. discusses the PC14 provisions as they relate to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs;
- d. provides an overview, analysis and evaluation of submissions and further submissions received on the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs;
- e. provides conclusions and recommendations on whether to accept or reject each submission point; and
- f. provides conclusions and recommendations for changes to PC14 provisions or maps relating to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs based on the assessment and evaluation contained in the report.

2.2.6 Where appropriate, this report groups submission points that address the same provision or subject matter. A summary of my recommendations as to acceptance, acceptance in part or rejection of the submissions and further submissions is included throughout this report with detail provided in Appendix A – Table of Submissions with Recommendations.

2.2.7 As required by section 32AA, where I have recommended changes to the PC14 provisions a further evaluation of recommended changes (including reasonably practicable alternatives) has been undertaken and has been included throughout this report. I have also considered requests from submitters in relation to the provisions of s 32.

2.2.8 This report is intended to be read in conjunction with the following reports, documents, assessments, expert evidence and other material which I have used or relied upon in support of the opinions expressed in this report:

- a. the Section 42A Assessment Report: Part A – Strategic Overview (prepared by Sarah Oliver), including:
 - all statutory matters and instruments, background information and administrative matters pertaining to PC14 discussed in that report;
 - the overview of the relevant Christchurch District Plan Objectives and Policies as they relate to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs as discussed in that report.
 - the overview of PC14 in particular as it relates to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs as discussed in that report; and
- b. the advice and recommendations of the following experts for the Council, as set out in their statements of evidence:
 - Industrial Interface QM
 - Jeremy Trevathan (Principal Acoustic Engineer and Managing Director at Acoustic Engineering Services) – Acoustic evidence for the Industrial Interface QM
 - Phil Osborne (Property Economics) – Economic evidence for the Industrial Interface QM
 - Significant and Other Trees QM
 - Toby Chapman (City Arborist - CCC) – Arboricultural evidence
 - Andrew Benson (The Tree Consultancy Company) – Tree protection zones and setbacks

- Hilary Riordan (Resource and Landscape Planner - CCC) – Landscape evidence for the Significant and Other Trees QM

Natural Hazards QMs

- Brian Norton (Senior Stormwater Planning Engineer - CCC) – Stormwater management evidence
- Jesse Dykstra (Principal Geotechnical Advisor - CCC) – Geotechnical evidence

All of the above QMs

- John Scallan (Senior Planner Urban Regeneration - CCC) – Housing capacity assessment

2.2.9 I have considered and assessed the following reports and documents in preparing this section 42A report:

- a. the Part 1 – Overview and High Level District Issues section 32 report and the Part 2 – Qualifying Matters section 32 report including all statutory matters and instruments, background information and administrative matters pertaining to PC14.
- b. submissions and further submissions related to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs; and
- c. all other associated documentation related to PC14 prepared by the Council insofar as it relates to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs.

2.2.10 The discussion and recommendations included in this report are intended to assist the IHP and submitters on PC14. Any conclusion and recommendations made in this report are my own and are not binding upon the IHP or the Council in any way. The IHP may choose to accept or reject any of the conclusions and recommendations in this report and may come to different conclusions and make different recommendations, based on the information and evidence provided to them by persons during the hearing.

3 KEY ISSUES IN CONTENTION

3.1.1 A number of submissions and further submissions were received on the provisions relating to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs.

3.1.2 I consider the following to be the key issues in contention:

a. Industrial Interface QM:

- Issue 1: Removal of QM
- Issue 2: More controls under QM
- Issue 3: Site and area specific changes to QM
- Issue 4: Specific changes to proposed QM provisions

b. Significant and Other Trees QM:

- Issue 1: Less controls under QM
- Issue 2: More controls under QM
- Issue 3: Site and area specific changes to QM

c. Natural Hazards QMs:

- Issue 1: Specific changes to proposed QM provisions
- Issue 2: Clarification of RUO and Coastal Hazards QM
- Issue 3: More controls in areas at risk of flooding
- Issue 4: Site and area specific changes related to flooding
- Issue 5: Remove flooding overlay
- Issue 6: Include controls for areas susceptible to non-coastal erosion
- Issue 7: Include controls for liquefaction and earthquake risk
- Issue 8: Include overlay for rockfall protection structures within slope instability areas

3.1.3 I address each of these key issues in this report, as well as any other issues raised by submissions.

4 OVERVIEW OF SUBMISSIONS AND FURTHER SUBMISSIONS AND REPORT STRUCTURE

4.1.1 PC14 was notified on 17 March 2023, with submissions and further submissions closing on 12 May 2023 respectively.

4.1.2 For the summary of submissions relating to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs refer to Appendix A. A copy of the submissions and further submissions received have been provided to the Hearing Panel and copies of all submissions can also be viewed on the Council website at <https://makeasubmission.ccc.govt.nz/PublicSubmissionSearch.aspx>.

4.1.3 The points made and decisions sought in submissions and further submissions can be grouped according to the issues raised, as set out in **Table 1** below, and they will be considered in that order further below in this section 42A report.

Table 1 – Overview of issues raised in submissions

QM	Issue	Concern/request
Industrial Interface	1. Removal of QM	- Remove the QM and associated objective, policy and rules Submissions: S2.7, S2.8, S2.9, S2.10, S2.11, S2.12, S2.13, S116.1, S116.2, S116.3, S116.4, S116.1, S116.2, S399.3, S399.4, S834.87, S834.88, S834.89, S834.90, S834.166, S834.167, S834.169, S834.171, S834.179, S834.184
	2. More controls under QM	- Increase QM buffer from 40m to an entire block Submissions: S734.7
	3. Site and area specific changes to QM	<ul style="list-style-type: none"> - Remove QM from 419 Halswell Junction Road - Rezone land to southwest of 312 Main South Road from High-density Residential Zone (HRZ) to Medium Density Residential Zone (MRZ) due to proximity to industrial activity - Include specific requirements for acoustic insulation - Include 240m buffer for HRZ land adjoining Industrial Heavy (IH) land - Remove QM adjoining Marian College - Extend QM to entire property parcels adjoining Inland Port Submissions:

		S2.6, S2.14, S243.1, S243.2, S243.5, S243.6, S788.3, S788.9, S823.206, S853.12
	4. Specific changes to proposed QM provisions	<ul style="list-style-type: none"> - Specific changes to Objective 14.2.12 - Specific changes to Policy 14.2.1.2.1 - Include Residential Hills Zone <p>Submissions:</p> <p>S212.10, S212.11, S243.3, S853.15, S853.16</p>
Significant and Other Trees	1. Less controls under QM	<ul style="list-style-type: none"> - Revert Tree protection zone radius back to dripline - Remove QM and associated provisions - Specific changes to Rule 9.4.4.1.1 P12 <p>Submissions:</p> <p>S405.1, S814.38, S814.14, S814.111 - 814.114, S823.14, S823.34, S834.26, S877.8</p>
	2. More controls under QM	<ul style="list-style-type: none"> - Strengthen tree protections - Prohibit removal of mature trees - Require mature replacement trees along road frontages <p>Submissions:</p> <p>S654.2, S654.3, S741.1, S741.2, S794.6, S900.4, S902.12</p>
	3. Site and area specific changes to QM	<ul style="list-style-type: none"> - Revert Rule 9.4.4.1.3 RD6 to existing Plan rule - Remove tree protections at 25 Peterborough Street - Remove tree protections at 83 North Avon Road - Remove tree protections at 20 Macmillan Avenue

		<ul style="list-style-type: none"> - Remove tree protections at 300, 304 Stanmore Road and 9, 11 Warwick Street - Remove tree protections at 32 Armagh Street - Remove tree protections at Daresbury site adjoining Fendalton Road, Daresbury Lane and Harakeke Street <p>Submissions:</p> <p>S44.7, S150.25, S150.26, S397.1, S499.1, S499.2, S705.2, , S814.115, S874.31, S1011.1, S1067.1</p>
Natural Hazards	1. Specific changes to proposed QM provisions	<ul style="list-style-type: none"> - Include provision requiring stormwater collection for new builds - Add natural hazards to Strategic Objective 3.3.7 - Add definition of acceptable risk to Policy 5.2.2.1.1 - Remove 'b' in Policy 5.2.2.2.1 - Include provisions enabling temporary, lightweight and modular housing in natural hazard areas - Add functioning and effective stormwater and wastewater network to Policies 14.2.8.5 and 14.2.8.6 <p>Submissions:</p> <p>S290.2, S377.1, S377.2, S377.10, S627.25, S692.2, S693.1, S693.2</p>
	2. Clarification of RUO and Coastal Hazard QM	<ul style="list-style-type: none"> - Clarify the interaction between the High Flood Hazard Management Area (HFHMA) Residential Unit Overlay (RUO) and the Coastal Hazard Management Area QM <p>Submissions:</p> <p>S380.6, S380.7</p>
	3. More controls in areas at risk of flooding	<ul style="list-style-type: none"> - Strengthen protections for existing homes against flood risk

		<ul style="list-style-type: none"> - Include consideration of flooding for intensification proposals - Include a QM for stormwater drainage systems - Strengthen provisions relating to increased stormwater - Include a QM for areas subject to surface flooding - Incorporate sponge city provisions - Incorporate controls around heavy rain events and higher tides - Require upgrade of stormwater and wastewater infrastructure before allowing intensification - Restrict density in MRZ and HRZ within the Flood Management Area (FMA) - Include provisions requiring development be relocatable within flood prone areas - Include QM for areas with frequent and serious flooding - Include controls to re-wild areas that flood due to heavy rainfall - Address existing flooding issues <p>Submissions:</p> <p>S11.5, S37.3, S63.91, S63.92, S112.16, S188.21, S188.22, S200.10, S290.1, S296.1, S377.8, S377.9, S377.12, S377.13, S480.4, S519.5, S580.6, S580.7 , S644.1, S644.7, S679.9, S793.5, S868.3, S875.2, S876.22, S876.24, S908.4, S1086.1</p>
	<p>4.Site and area specific changes related to flooding</p>	<ul style="list-style-type: none"> - Apply HFHMA and FPMA QM to Bluebell Lane - Do not apply HRZ to areas close to Papanui Road due to flood risk and stormwater issues - Include FMA as QM, particularly in Merivale

		<ul style="list-style-type: none"> - Remove HRZ from Perry Street - Apply QM to areas that drain into the mid-Heathcote Ōpāwaho - Apply QM to Palmside Street flooding - Change HRZ zoning to MRZ in Strowan and apply QM - Apply QM to South Richmond due to flooding risk <p>Change HRZ zoning to MRZ in Watford Street</p> <p>Submissions:</p> <p>S11.8, S73.1, S94.1, S246.1, S246.2, S 329.1, S583.3, S583.6, S583.7, S653.10, S668.1, S668.2, S668.4, S680.2, S680.3, S692.1, S692.3, S692.9, S692.10, S693.3, S693.9, S693.10, S794.2, S794.3, S794.8, s901.15</p>
	<p>5.Remove flooding overlay</p>	<ul style="list-style-type: none"> - Remove the flooding overlay at 25a Greenhaven Drive - Remove Natural Hazards QMs from the Summerset Cavendish site - Remove the mapped Hazard Management Areas from the Plan and include as non-statutory GIS maps <p>Submissions:</p> <p>S159.3, S443.12, S834.20, S834.21, S834.22, S834.23, S834.24, S877.4</p>
	<p>6.Include controls for areas susceptible to (non-coastal) erosion</p>	<ul style="list-style-type: none"> - Include a high soil erosion risk area QM - Include a severe erosion QM in the upper Halswell River catchment due to downstream flooding effects <p>Submissions:</p> <p>S159.3, S443.12, S834.20, S834.21, S834.22, S834.23, S834.24, S877.4</p>

	<p>7. Include controls for liquefaction and earthquake risk</p>	<ul style="list-style-type: none"> - Retain Residential Suburban (RS) zoning for TC3 land - Include TC3 land as a QM - Include TC2 land as a QM - Undertake geotechnical investigation reports for all suburbs before PC14 takes effect - Include earthquake risk QM - Apply QM to South Richmond due to earthquake risk - Address liquefaction risk - Retain RS zone for in South and East Harewood Road and Main North Road around Paparoa Street, Strowan - Apply earthquake QM across entire city, or at least to TC3 land <p>Submissions:</p> <p>S54.2, S54.8, S246.4, S255.5, S255.6, S440.5, S707.2, S763.1, S778.1, S778.2, S778.3, S779.1, S794.2, S794.3, S794.8, S868.3, S898.2, S902.3, S902.4, S867.1, S902.5, S902.7, S1086.1</p>
	<p>8. Include overlay for rockfall protection structures within slope instability areas</p>	<ul style="list-style-type: none"> - Adopt the Building Code guidance document as an acceptable method of reducing rockfall hazard on a site-specific basis - Include an overlay for existing rockfall protection structures within slope instability areas - Remove point 7 in Clause 5.6.1.2 <p>Submissions:</p> <p>S231.1, S240.1, S368.1</p>

4.1.4 Some submissions raise more than one matter, and these will be discussed under the relevant issues in this report. I note that I have considered substantive commentary on primary submissions

contained in further submissions as part of my consideration of the primary submissions to which they relate.

4.1.5 The submissions in support of these QMs are set out in Table 2 below. Note where these submitters have sought amendments this is set out in Table 1.

Table 2 – Submissions in support

QM	Submissions in support
Industrial Interface	S175.1, S243.4, S689.53, S689.54, S689.73, S853.13, S853.14, S902.24, S902.25, S902.26
Significant and Other Trees	S23.5, S145.14, S145.16, S180.3, S519.14, S834.25, S834.27- 834.29, S876.17 - 876.21
Natural Hazards	S205.4, S205.5, S377.6, S377.7, S689.73, S804.2, S804.8, S834.18, S834.19, S881.22, S900.2, S1009.4

4.1.6 For each identified topic, the consideration of submissions has been undertaken in the following format:

- a. Matters raised by submitters;
- b. Assessment;
- c. Summary of recommendations. The specific recommendations are in Appendices A and B;
- d. Section 32AA evaluation where necessary.

4.1.7 For ease of reference, all submission points considered under a particular issue, as outlined in **Table 1**, are listed in the heading of the relevant discussion. Following discussion and evaluation of the submissions and further submissions, the names of submitters and recommendations on their submissions within or at the end of the discussion, are typed in bold within this report. My recommendation on each submission and a summary of reasons are also shown in a table format in Appendix A– Table of Submissions with Recommendations, attached to this report.

4.1.8 As a result of consideration of submissions, for the reasons discussed below I recommend some amendments to the District Plan provisions. I have provided a consolidated ‘track changes’ versions of the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs with my recommended amendments in response to submissions as Appendix B. In Appendix B, the

operative District Plan text is shown as normal text in italics. Amendments proposed by PC14 as notified are shown as italicised bold underlined text in black or black bold strikethrough text. Any text recommended to be added by this report will be shown as red bold underlined text in italics and that to be deleted as red bold strikethrough text in italics. Text in green denotes existing defined expressions and in bold green underlined shows proposed new definitions. Text in blue represents cross-reference jump links to other provisions in e-plan.

- 4.1.9 The evaluation of submissions provided in this section 42A report should be read in conjunction with the summaries of submissions and further submissions, and the submissions themselves as well as the following appendices:
- 4.1.10 Appendix A – Recommended Responses to Submissions and Further Submissions on the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs;
- 4.1.11 Appendix B – Recommended Amendments to QMs;
- 4.1.12 Appendix C – Higher order documents relevant to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs; and
- 4.1.13 Appendix D – Relevant QM objectives and policies in the Plan.
- 4.1.14 After addressing procedural matters and out of scope submissions, and the general background to PC14 and statutory considerations (section 6 of this report), I then consider each QM / group of QMs in its own specific section of this report (sections 7 – 9 of this report). My report concludes with a brief discussion of minor and inconsequential amendments, and a summary of my overall conclusions and recommendations (sections 10 – 11 of this report).

5 PROCEDURAL MATTERS AND OUT OF SCOPE SUBMISSIONS

5.1 PROCEDURAL MATTERS

- 5.1.1 At the time of writing this report there has been a pre-hearing conference on 1 August 2023. There have not been any clause 8AA meetings or expert witness conferencing in relation to submissions on any Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QM provisions to date.
- 5.1.2 It is noted that some submissions on the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs relate to matters that will be addressed in other s 42A reports.

Where a submission point is included in the summary tables for the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs but would be more suitable to be assessed under other reports, this has been noted in the relevant table. Likewise, if submission points have been addressed in the 'Strategic overview' s 42A report (for example definitions), this has been noted in the summary tables.

5.2 OUT-OF-SCOPE SUBMISSIONS

5.2.1 The section 42 A report prepared by Ms Sarah Oliver provides a summary of her understanding of the principles to be applied in determining whether submission points are within scope of a plan change. I have read, and agree with that summary. To assist the Panel, I have identified submission points that I consider fall, or potentially fall, outside of scope below.

5.2.2 In accordance with the established legal tests for determining whether submissions are within scope or not as set out in the 'Strategic Overview' section 42A report, the following are considered to be out-of-scope submissions points regarding the **Significant and Other Trees QM** and the **Natural Hazards QMs**:

Sub. No.	Submitter name	Summary of relief sought [<i>copy from the summary of submissions table</i>]	Further submissions	Recommendation
397.1	Jane Katie Carter	Removal from the District Plan of a Significant tree at 83 North Avon Road Richmond Christchurch.		Reject/outside scope
1067.1	Catherine Elvidge	The submitter seeks that the 16 Papanui War Memorial Avenues not be listed as a heritage item in Appendix 9.3.7.2. Alternatively they seek that: <ul style="list-style-type: none"> - The listing be amended to include the specific aspects of the streets which comprise the item. - The plaques not be included in the listing. - A street-by-street assessment of each street be undertaken and only trees from the original memorial planting or others of significant landscape value be listed. - The trees be included in sub-chapter 9.4 Significant and other trees, rule 9.4.1.1 P6 and P12, instead of sub-chapter 9.3 Historic heritage. 		Reject/outside scope
159.3	Jenny Crooks	That 25a Greenhaven Drive, Burwood, be rezoned from Rural Urban Fringe Zone to residential (Medium Density Residential		Reject/outside scope

		Zoning preferred) and not be subject to flooding overlays.		
902.12	Waipuna Halswell-Hornby-Riccarton Community Board	[That new rules are added to require] that a tree be replanted on the roadside where trees have been removed and that it be as mature as possible. [Non-compliance with this requirement] should be a “discretionary activity”.	FS2063.183, FS2064.177, FS2082.1274	Reject

- 5.2.3 In her submission **S397.1 Jane Katie Carter** seeks the removal from the District Plan of a Significant tree at 83 North Avon Road Richmond Christchurch. I note the tree is included in Appendix 9.4.7.1 as T968 and is proposed as a Non-QM tree. I consider that the removal of a Non-QM tree from Appendix 9.4.7.1 falls outside scope of this IPI as there is no basis under Policy 3 or the Housing Supply Amendment Act to consider this matter and it would be best dealt with outside PC14.
- 5.2.4 In her submission **S1067.1 Catherine Elvidge** seeks that the 16 Papanui War Memorial Avenues not be listed as a heritage item in Appendix 9.3.7.2. Alternatively, she seeks that the trees be included in sub-chapter 9.4 Significant and other trees, Rule 9.4.1.1 P6 and P12, instead of sub-chapter 9.3 Historic heritage. This submission has been addressed in the heritage s 42A evidence with exception of the abovementioned request regarding P6 and P12. The submission was in relation to PC13 only and the submitter did not want her submission considered as part of PC14. This submission is therefore considered out of scope for the purposes of the s 42A consideration and it will be addressed in PC13.
- 5.2.5 In **S159.3, Jenny Crooks**, seeks that 25a Greenhaven Drive, Burwood, be rezoned from Rural Urban Fringe Zone to residential (Medium Density Residential Zoning preferred) and not be subject to flooding overlays. This property is zoned Rural Urban Fringe (and the vehicle access is zoned RS) and is within the Fixed Minimum Floor Level Overlay within the FMA. I consider this request falls outside the scope of PC14, particularly noting this site is not within a relevant residential zone, and Policy 3 also does not apply.
- 5.2.6 The **Waipuna Halswell-Hornby-Riccarton Community Board** submission **S902.12** seeks new rules are added to require that a tree be replanted on the roadside where trees have been removed and that it be as mature as possible. They seek that non-compliance with this requirement should be a discretionary activity. Mr Chapman has reviewed this submission and outlines the removal of any street tree over 6 meters (not in the central city area or on a state highway) would currently be a restricted discretionary activity. He is not in support of this submission, and considers the term ‘as mature as possible’ would be difficult to interpret and enforce as maturity of a tree is not a distinct

phase in a tree's life cycle. Furthermore, he is mindful that when mature trees are planted they will often have difficulties establishing in a new site and tree loss becomes more common. He notes the current practice of planting a 45ltr tree is more appropriate. I accept this advice. In any case I note the Significant and Other Trees QM does not extend to street trees as it only applies to trees within Appendix 9.4.7.1 assessed to be QM trees.

5.2.7 Regarding the **Industrial Interface QM**, I am not aware of any submissions on PC14 in relation to these QMs which could be considered out-of-scope, as most submitters on this topic have been specific about their concerns, and I consider the variety of relief sought to be 'on the plan change'.

5.2.8 Ms Oliver, in her S 42A Report, also discusses the recent Environment Court decision, *Waikanae Land Company v Heritage New Zealand Pouhere Taonga* [2023] NZEnvC 056 (Waikanae), which addresses the scope of local authorities' powers in notifying an Intensification Planning Instrument in accordance with section 80E of the RMA, and the potential implications for PC14. I have read, and agree with, that discussion. To assist the Panel to identify provisions potentially affected by Waikanae, I have specifically noted in the report where provisions impose additional controls or restrictions that affect status quo/pre-existing development rights (as per the Operative District Plan).

6 BACKGROUND AND STATUTORY CONSIDERATIONS

6.1 THE RESOURCE MANAGEMENT ACT 1991

6.1.1 The 'Strategic Overview' 42A report, Part 1 section 32 report, and Part 2 – Qualifying Matters section 32 report provide a detailed overview of the key RMA matters to be considered by PC14 and are not repeated in detail here. Rather, I provide a summary of the key points with a focus on the matters relevant to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs.

6.1.2 In summary, PC14 has been prepared in accordance with the purpose and principles of RMA and in particular, the requirements of:

- a. Section 74 Matters to be considered by territorial authority;
- b. Section 75 Contents of district plans; and
- c. Section 76 District Rules.

- 6.1.3 Section 6 of the RMA requires that the following relevant matters of national importance are recognised and provided for: (f) the protection of historic heritage from inappropriate subdivision, use, and development; and (h) the management of significant risks from natural hazards.
- 6.1.4 Section 7 of the RMA requires there be particular regard to the following relevant matter: (b) the efficient use and development of natural and physical resources; (c) the maintenance and enhancement of amenity values; (d) intrinsic values of ecosystems; (f) maintenance and enhancement of the quality of the environment; and (i) the effects of climate change.
- 6.1.5 As discussed in the 'strategic overview' section 42A report prepared by Ms Sarah Oliver, and the Part 1 Overview and High Level District Issues and Part 2 – Qualifying Matters section 32 reports the Housing Supply Amendment Act requires the Council to make changes to the Plan for the purposes of:
- a. Incorporating MDRS into all relevant residential zones (s77G(1));
 - b. Implementing the urban intensification requirements of the NPS-UD (s77G(2)) and give effect to policy 3 in non-residential zones (s77N); and
 - c. Including the objectives and policies in clause 6 to Schedule 3A of the RMA (s77G(5)).
- 6.1.6 The required plan changes and variations must be undertaken using an IPI in accordance with sections 80E to 80H of the RMA. Councils must use the ISPP set out in Part 6 of Schedule 1 of the RMA.
- 6.1.7 The primary focus of PC14 is to achieve the above requirements of the RMA as amended by the Housing Supply Amendment Act.
- 6.1.8 As set out in the 'Strategic Overview' section 42A report, and the section 32 reports there are a number of higher order planning documents and strategic plans that provide direction and guidance for the preparation and content of PC14. This report includes an assessment of the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions in relation to these documents and plans and all statutory considerations.

6.2 HIGHER ORDER PLANNING DOCUMENTS

- 6.2.1 The key higher order planning documents that are particularly relevant to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs are set out in Appendix C below. I highlight a number of key points in the text that follows.

- 6.2.2 Turning firstly to the **Industrial Interface QM**, CRPS *Objective 6.2.6 Business land development* provides for the growth of business activities (including industrial activities) in a manner that supports the settlement pattern brought about by *Objective 6.2.2 Urban form and settlement pattern*. Furthermore, CRPS *Policy 6.3.6. Business land* seeks to ensure that provision of business land in Greater Christchurch maximises business retention, attracts investment, and provides for healthy working environments, business activities are to be provided for in a manner which, among other things, ensures reverse sensitivity effects and conflicts between incompatible activities are identified and avoided or mitigated against. The NPS-UD *Objective 1* specifically includes enabling people and communities to provide for their economic wellbeing and health in safety in the consideration of what constitutes a well-functioning urban environment. In addition, NPS-UD *Objective 2* seeks that planning decisions improve housing affordability by supporting competitive land and development markets.
- 6.2.3 With respect to the **Significant and Other Trees QM**, the NPS-UD *Objective 1* is relevant in that trees contribute to the health of people and communities now and into the future, as well as contributing to social well-being. *Objective 8* and *Policy 1* of the NPS-UD applies as trees support the reduction of greenhouse gas emissions and contribute to resilience against the effects of climate change. CRPS *Objective 13.2.1* seeks the identification and protection of significant historic heritage items, places and areas, and their particular values that contribute to Canterbury's distinctive character and sense of identity from inappropriate subdivision, use and development. This objective applies to some significant trees with historic values but not all significant trees.
- 6.2.4 Finally, regarding the **Natural Hazards QMs**, as set out above, this s 42A report excludes consideration of the Coastal Hazard Management Area and Tsunami Management Area QMs as these are addressed in a separate report of Ms Sarah Oliver.
- 6.2.5 As stated in the Part 2 – Qualifying matters s 32 report, the management of significant risks from natural hazards is a matter of national importance in exercising functions and powers in relation to the use, development and protection of resources in section 6 of the RMA. S31(1)b sets out that controlling use and development of land for the avoidance or mitigation of natural hazards is part of the functions of a territorial authority.
- 6.2.6 *Policy 24* of the NZCPS requires that the effects of sea level rise are to be assessed by taking into account national guidance and best available information on climate change and its effects over at least a 100 year timeframe. *Policy 25* seeks to avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards. It is noted that the HFHMA to a

very limited extent addresses coastal flooding noting that there is overlap with the proposed Coastal Hazard Management Areas QM (and incorporates some consideration for sea level rise) and therefore this policy would be relevant.

- 6.2.7 The NPS-UD *Objective 1* specifically includes enabling people and communities to provide for their health in safety in the consideration of what constitutes a well-functioning urban environment. The NPS-UD *Objective 8* seeks that urban environments support reductions in greenhouse gas emissions; and are resilient to the current and future effects of climate change. Furthermore NPS UD *Policy 1* seeks that well-functioning urban environments include support reductions in greenhouse gas emissions and are resilient to the likely current and future effects of climate change. Similarly, NPS-UD *Policy 6* seeks that decision makers have regard to the likely current and future effects of climate change.
- 6.2.8 *Objective 11.2.1* of the CRPS seeks to avoid new subdivision, use and development of land that increases risks associated with natural hazards. The CRPS requires objectives and policies and methods to avoid new subdivision, use and development that does not meet criteria set out in Policy 11.3.1 for known high hazard areas. CRPS, *Policy 11.3.2* requires plans giving effect to the CRPS to ‘avoid new subdivision, use and development of land in known areas of subject to inundation by a 0.5% AEP (1 in 200 year) flood event, unless it is of a type that is not likely to suffer material damage in an inundation event, new buildings have an appropriate floor level to avoid inundation in a 0.5% AEP flood event, and taking into account climate change projections’.
- 6.2.9 The CRPS contains little specific discussion of slope instability, however *Policies 11.3.5 and 11.3.7* are relevant. *Policy 11.3.5* directs that subdivision, use and development of land shall be avoided if the risk from the natural hazard is considered to be unacceptable. When there is uncertainty in the likelihood or consequences of a natural hazard event, the local authority shall adopt a precautionary approach. *Policy 11.3.7* seeks that new physical works to mitigate natural hazards will be acceptable only where the natural hazard risk cannot reasonably be avoided.

6.3 SECTION 32AA

- 6.3.1 As noted above I have undertaken an evaluation of the recommended amendments I am proposing to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs since the initial section 32 evaluation was undertaken in accordance with s 32AA.
- 6.3.2 The Section 32AA evaluations contain a level of detail that corresponds to the scale and significance of the anticipated effects of the changes that have been made. Recommendations on editorial,

minor, and consequential changes that improve the effectiveness of provisions without changing the policy approach are not re-evaluated. No re-evaluation has been undertaken if the amendments have not altered the policy approach.

6.3.3 For changes that represent a significant departure from the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions as notified as notified, I have undertaken the s 32AA evaluation within the report in the same location as a recommendation.

6.4 TRADE COMPETITION

6.4.1 Trade competition is not considered relevant to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs.

6.4.2 There are no known trade competition issues raised within the submissions.

6.5 CHRISTCHURCH DISTRICT PLAN

6.5.1 The relevant district plan provisions also need to be considered in preparing a plan change and considering any submissions on the change.

6.5.2 The Part 2, Qualifying Matters section 32 report contains an evaluation of PC14 including provisions concerning the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs. I agree with the assessment carried out.

6.5.3 The Plan provisions are particularly important for the Significant and Other Trees QM, and the Natural Hazard QMs because these QMs utilise the existing Operative District Plan provisions, with the exception of the proposed tree protection zone radius requirement.

6.5.4 Turning firstly to the **Industrial Interface QM**, there are currently no specifically applicable objectives or policies within the Plan. Therefore, PC14 proposed a new objective and policy and these were assessed in the Section 32 reports prepared for PC14 in terms of consistency with the relevant strategic directions set out in Chapter 3 of the Plan as amended by PC14, and appropriateness in achieving the purpose of the Act.

6.5.5 Chapter 3 Strategic Directions of the Plan provides the overarching direction for the Plan and all other chapters of the Plan must be consistent with its objectives (3.1). It provides a direction/framework for the Industrial Interface. *Strategic Objective 3.3.5 Business and economic prosperity* seeks that the critical importance of business and economic prosperity to Christchurch's

recovery and to community wellbeing and resilience is recognised and a range of opportunities provided for business activities to establish and prosper. *Strategic Objective 3.3.11 Commercial and industrial activities* seeks to ensure the recovery and stimulation of industrial activities in a way that expedites recovery and long-term economic and employment growth through ensuring sufficient and suitable land development capacity.

- 6.5.6 The Plan also includes a number of existing objectives and policies for industrial activities in industrial zones. *Objective 16.2.3 Effects of industrial activities* seeks that the adverse effects of industrial activities and development on the environment are managed to support the anticipated outcome for the zone while recognising that sites adjoining an industrial zone will not have the same level of amenity anticipated by the Plan as other areas with the same zoning.
- 6.5.7 With respect to the **Significant and Other Trees QM**, Chapter 3 Strategic Directions of the Plan provides a direction/framework for this QM. *Strategic Objective 3.3.10 'Natural and cultural environment'* seeks a natural and cultural environment where, among other things, important natural resources are identified and their specifically recognised values are appropriately managed. *Objective 9.4.2.1.1 Trees* and the key tree protection policies included in Chapter 9.4 of the Plan are set out in Appendix D.
- 6.5.8 Finally with respect to the **Natural Hazards QMs**, Chapter 3 Strategic Directions of the Plan provides a direction/framework for the Natural Hazards QMs. *Strategic Objective 3.3.6 Natural hazards* is included in full in Appendix D, along with the key natural hazards policies, contained in Chapter 5.2 of the District Plan. This objective is also the only objective for the Natural Hazards Chapter (Objective 5.2.1.1). This objective and associated natural hazards policies are set out in full in Appendix D. *Plan Objective 3.3.6 Natural hazards* seeks that new subdivision, use and development is to be avoided in areas where the risks from natural hazards to people, property and infrastructure are assessed as being unacceptable; and in all other areas, is undertaken in a manner that ensures the risks of natural hazards to people, property and infrastructure are appropriately mitigated. *Policy 5.2.4* sets out a precautionary approach where there is uncertainty, hazards or a potential for serious or irreversible effects. *Policy 5.5.5* implements a control regime for hazard mitigation works, which give effect to the policies in Chapter 11 of the CRPS. These objectives and policies set out strong direction to identify and manage natural hazards. In my opinion, it sets a clear direction to avoid development in areas at risk of natural hazards where the risk is assessed as unacceptable. The strategic objective sets the scene for the risk based approach to natural hazards in the Plan.

6.5.9 The rules for the HFHMA, the FPMA and slope instability are contained largely in Chapter 5 Natural Hazards, which are district wide provisions of the Plan. Furthermore, the Plan identifies areas of slope instability in the Port Hills, Banks Peninsula and Lyttleton taking a risk based approach which factors in the scale of particular hazards together with the likelihood of an event and the effects it would cause on people and property.

6.5.10 A brief overview of the existing Plan controls are as follows:

Overlay	Controls
HFHMA	<ul style="list-style-type: none"> - Allows for replacement residential unit under certain circumstances - Within the RUO provides pathway for a new residential unit, replacement unit and additions via resource consent - Non-complying activity status for other new buildings and subdivision
FPMA	<ul style="list-style-type: none"> - Allows for replacement residential unit under certain circumstances - Allows for a residential unit (one per site, on piles or no more than 200m² ground floor area) - Non-complying activity status where residential units do not meet the permitted activity specific standards
Slope instability (Cliff Collapse Management Area 1, Cliff Collapse Management Area 2 and Rockfall Management Area 1)	<ul style="list-style-type: none"> - Subdivision is non-complying (and prohibited where the subdivision is solely located within the Cliff Collapse Management Area 1) - Buildings and structures are non-complying (some exceptions) within the Cliff Collapse Management Area 2 and Rockfall Management Area 1 - Buildings and structures are prohibited (some exceptions) within the Cliff Collapse Management Area 1

7 PLAN CHANGE 14 – INDUSTRIAL INTERFACE QM

7.1 OVERVIEW

7.1.1 The Industrial Interface QM proposes a building height and storey limit on residential development enabled under MDRS and Policy 3 within 40m of the interface of residential zones with industrial zones. The QM introduces a 7m/two storey building height limit in residential zones within a 40m buffer measured from the boundary with industrial zones. Where this is not achieved resource consent would be required as a discretionary activity. The Industrial Interface QM is proposed under sub-sections s771 (i) and s770 (i) of the Act which provide for QMs necessary to accommodate *‘the requirement in the NPS-UD to provide sufficient business land suitable for low density uses to meet expected demand’*.

7.1.2 Introducing a greater density of residential development at greater building heights adjoining (either directly abutting or across the road from) industrial zones has the potential to give rise to effects on future occupants of the residential development and reverse sensitivity effects on currently compliant industrial activities. While there are a range of potential effects arising from industrial activities, noise is the focus of this QM given that introducing three-storey development at the interface may result in a situation where industrial activities that currently achieve the noise controls in the Plan will no longer comply due to increased residential building heights. Enabling a third storey in residential zones would create a new receiving environment and modelling suggests that where single and even two-storey dwellings have sufficient screening from industrial activities, there is potential for greater noise exposure at the third storey level resulting in non-compliance with the District Plan.

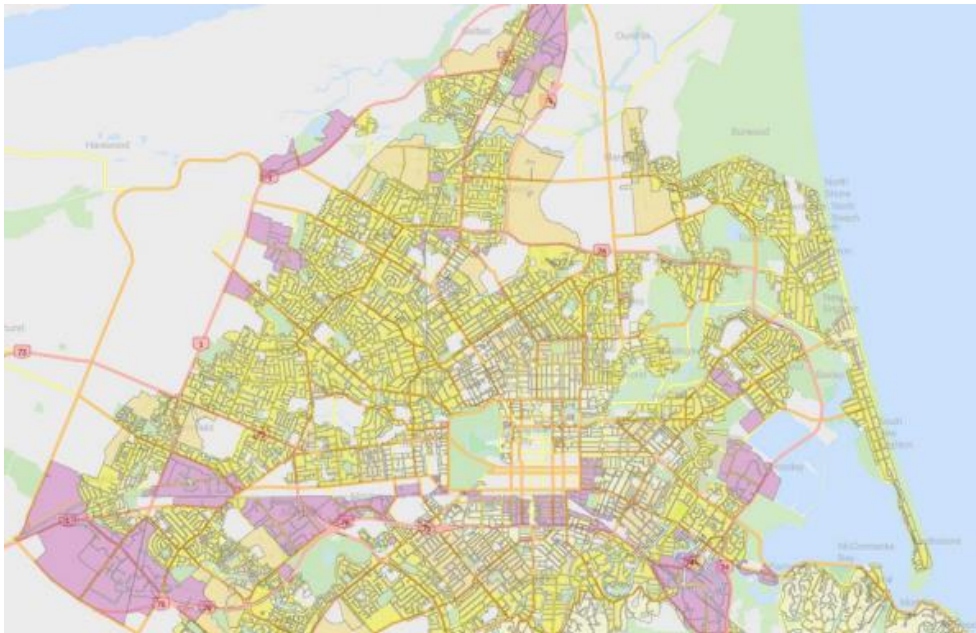
7.2 CURRENT PLAN CONTROLS AT THE INTERFACE

7.2.1 There are three types of industrial zones in the Plan; the Industrial General Zone, the Industrial Heavy Zone, and the Industrial Park Zone. A description of each of the three industrial zones is included in *Policy 16.2.1.3 Range of industrial zones*.

7.2.2 The activities anticipated in the above zones are set out in detail in the Acoustic Engineering Services (AES) report (Appendix 39 attached to the Part 2 - Qualifying Matters s 32 report². The

² <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/PC14-Notification-QM-Industrial-interface-AES-Report-s 32-Appendix-39-v2.PDF>

below image provides an overview of current Industrial Zones (pink) and Residential Zones (yellow) interfaces across urban Christchurch.



- 7.2.3 There are a range of adverse effects that industrial activities could potentially have on residential activities, including noise, odour, dust, vibration, lighting, traffic and visual amenity effects. The District Plan currently manages the potential effects of industrial activities in industrial zones on adjoining residential zones through controls on noise, transport standards (such as high trip generation), earthworks, setbacks, recession planes, screening of outdoor storage, landscaping and building height.
- 7.2.4 Odour and dust effects are largely addressed through the Regional Council (although there is an odour buffer applicable adjacent to Belfast Road site in Appendix 8.10.24 under the East Belfast Outline Development Plan). Traffic effects are addressed in Chapter 7 of the Plan, particularly through the high trip generation provisions. It is noted that the Plan does not consider effects arising within the road corridor. Turning to visual amenity, the Plan sets an expectation that industrial zones are not zones of high amenity through the setting of the activity status and built form standards given the nature of these zones. There are no changes proposed to these standards, such as setbacks and landscaping. The Plan also contains standards on light spill and earthworks.
- 7.2.5 Furthermore, the Plan includes set noise limits for each of the industrial zones. Importantly, the Plan sets noise limits for noise received within residential zones. All activities, including industrial activities in industrial zones, must comply with these limits or apply for resource consent. The AES

report (Appendix 39 of the Part 2 Qualifying Matters 32 report) sets out in detail the noise controls in the Plan. Operative *Rule 6.1.4.1 Measurement and assessment of noise* requires, unless otherwise specified elsewhere in this District Plan, noise shall be measured in accordance with NZS 6801:2008 “Acoustics – Measurement of environmental sound”, and assessed in accordance with NZS 6802:2008 “Acoustics-Environmental noise”, except that provisions in NZS 6802 referring to Special Audible Characteristics shall not be applied. NZS6802:2008 requires assessment of noise compliance at 1.2 – 1.5 metres above any floor level of interest. Changes to the noise controls and industrial built form and activity status controls are not considered to be within scope of the IPI.

7.2.6 In terms of building heights and densities, the residential zones in the current District Plan allow for the following building heights and densities:

Zone	Building height	Site density
Residential Suburban (RS)	8m 5.5m and single storey for minor residential units	One residential unit on 450m ² (and minor unit of 35-80m ²)
Residential Suburban Density Transition (RSDT)	8m 5.5m and single storey for minor residential units	One residential unit on 330m ² (and minor unit of 35-80m ²)
Residential Hills (RH)	8m 5.5m and single storey for minor residential units	One residential unit on 650m ² (and minor unit of 35-80m ²)
Residential Medium Density (RMD)	11m and maximum of 3 storeys (except within specific overlays)	No minimum site density requirements. Minimum vacant site allotment size of 200m ² .

7.3 RATIONALE FOR INDUSTRIAL INTERFACE QM

7.3.1 Development within the Medium Density Residential and High Density Residential Zones would enable height limits of 11m and 14m respectively, with no limit on density³. Changes to subdivision controls through the MDRS also mean that there cannot be any minimum allotment size around existing or proposed dwellings. This means there is potential for much greater density along

³ Vacant allotments size requirements would be 400m² and 300m² respectively.

industrial/residential interfaces than currently possible and greater building heights. Given the nature of existing and anticipated activities in industrial zones, this could give rise to reverse sensitivity effects and associated constraints on operations for industrial activities, by exposing more people to the externalities associated with industrial activities.

7.3.2 Should development occur at the interface in accordance with MDRS and Policy 3 of the NPS-UD, the existing Plan provisions are not considered adequate to manage potential effects on residents, and potential reverse sensitivity effects on industrial activities, where residential development is constructed higher and is therefore exposed to potentially higher levels of noise given the likelihood of less screening at the three-storey level. As noted above, NZS6802:2008 requires assessment of noise compliance at 1.2 – 1.5 metres above any floor level of interest. Therefore, there may be new receiving environments created which receive higher noise levels than in the current situation, and this may result in currently complying levels of noise from industrial activities exceeding the noise limits. This has the potential to unduly constrain industrial activities that would comply with the District Plan noise limits as they are currently, however may no longer comply due to receiving environments being created which receive higher noise levels. There is potential for noise disturbance effects at the three-storey level and associated reverse sensitivity effects on industrial activities. The greater development potential may mean that the third storey of new dwellings ‘overlook’ industrial activities to a greater extent, and do not acoustically benefit from the screening of typical boundary fences, or intervening buildings.

7.3.3 The costs and benefits of the qualifying matter are set out in section 6.22 of the Part 2 – Qualifying Matters s 32 report⁴ which recommends a 40m buffer restricting development to two-storeys as considered the most appropriate in achieving the objectives and higher order documents.

7.3.4 I am mindful that in many cases where three-storey residential development is established adjoining industrial zones there would be no compliance issue. Jeremy Trevathan from AES provided advice as part of the s 32 assessment, and has also prepared evidence. In this regard, Mr Trevathan has commented that these situations where there would be no compliance issues include:

⁴ Pages 148 – 151 of <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

- The industrial activities are low noise emitting, and comply with the Plan noise limits by a considerable margin, at all receivers' heights.
- The industrial noise sources are effectively screened, even when the receiver is a three-storey dwelling.
- The industrial noise sources are far from the interface (for example > 100 metres) and so receiver height makes relatively little difference.
- The industrial sources are closer to the interface but currently have little effective screening and so already have to manage their noise emissions, and so receiver height makes relatively little difference. A common example of this arrangement is when the residential and industrial areas are 'across the road' from each other - as they are unlikely to have solid, continuous fences to the road boundary, due to access requirements.

7.3.5 The 40m buffer is based on modelling of the existing situation i.e. predominantly single level dwellings adjoining the interface. This does not take into account that two-storey development is permitted as of right. The modelling suggests that where noise would comply at the second storey level, then a 15m buffer may be appropriate as the difference between two level and three level in terms of noise exposure is not as great as from single level to third level. The proposed approach takes into account the existing environment, however there is potential to apply the buffer to a lesser distance of 15m and still reduce potential for reverse sensitivity effects. This is addressed in the Part 2 – Qualifying Matters s 32 report cost benefit table (see section 6.22.12⁵). I note the QM would not restrict two-storey development, and industrial activities would need to meet the residential noise limits in the Plan where received at the two storey façade. The 40m allows a sufficient degree of confidence that inappropriate development does not occur at the interface, potentially constraining the operation of industrial activities that would meet the noise standards where adjoined by one and two-storey development. The 40m buffer is considered the most effective and efficient option to address potential reverse sensitivity effects.

7.3.6 I am mindful that another approach that could be taken for this QM is to apply the two-storey restriction across entire property parcels where directly abutting or across the road from industrial zones. However as demonstrated in the modelling, noise effects change due to distance and screening. The 40m buffer would provide both distance and potential screening (such where one

⁵ Pages 148 – 151 of <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

to two-storey developments exist within the buffer) with reverse sensitivity effects lessening further from the source of noise. Applying the QM over entire parcels would potentially unnecessarily restrict residential development where effects are unlikely to arise.

7.3.7 In the case where three-storey residential developments are proposed across the road from industrial zones, it is possible that the intervening road noise would also apply and acoustic mitigation may be required under Rule 6.1.7.2.1 depending on the classification of the road. This may mean there is some overlap in the effect of the rules. However there are some exceptions to this road noise rule (such as road noise being measured as under a certain level) and it would not deal with the issue of noise from industrial activities becoming non-compliant as measured at the third storey façade of residential development. In addition, NZS 6802:2008 requires that noise emissions are measured at the external façade of buildings rather than internally and therefore acoustic insulation required in the above rule would not prevent industrial noise emissions being non-compliant with the residential noise standards in the Plan. Accordingly, I consider it is appropriate for both Rule 6.1.7.2.1 and the 40m industrial interface setback rule to apply in such circumstances.

7.4 IMPACT ON DEVELOPMENT CAPACITY

7.4.1 The proposed Industrial Interface QM would enable medium density development to a lesser extent because of more restrictive height controls. An assessment of the impact of QMs on development capacity enablement under MDRS has been undertaken in the evidence of Mr John Scallan. The assessed Plan enabled potential impact on development capacity for the Industrial Interface QM is 8870 units. The assessed feasible potential impact on development capacity is 1441 units. This assessment does not indicate lost capacity, rather it indicates the capacity that may be impacted by this QM. In addition, it does not take into account capacity derived from apartment development. Therefore, there could be additional capacity impacted noting this QM could result in less apartment buildings being constructed within the 40m buffer, for instance apartment buildings with three or more storeys would require resource consent.

7.5 TECHNICAL EVIDENCE

7.5.1 This report is intended to be read in conjunction with the following expert evidence which I have used or relied upon in support of the opinions expressed in this report:

- Jeremy Trevathan (Principal Acoustic Engineer and Managing Director at Acoustic Engineering Services) – Acoustic evidence for the Industrial Interface QM

- Phil Osborne (Property Economics) – Economic evidence for the Industrial Interface QM
- John Scallan (Senior Planner Urban Regeneration - CCC) – Housing capacity assessment

7.6 ECONOMIC EVIDENCE

- 7.6.1 Mr Osborne has provided commentary on the Industrial Interface QM in his evidence. He outlines that reverse sensitivity is a significant concern for businesses throughout New Zealand and the increased pressure on land use activities has brought many into conflict with residential activities, particularly around noise, vehicle movements, and light-spill. He notes the risk associated with reverse sensitivity is generally proportionate to the level of contending land uses affected. He considers that in Christchurch, reverse sensitivity issues have the potential to meaningfully impact upon the City's economy and community wellbeing. In 2022 there were over 67,000 industrial jobs within Christchurch that contributed 36% of the city's gross domestic product (**GDP**). In his view the economic wellbeing of Christchurch is based on the ability for these businesses to operate efficiently and for the city to be competitive in attracting and keeping this level of activity.
- 7.6.2 He outlines that the economic costs associated with managing reverse noise sensitivity are essentially twofold. The limitation of residential development within the 40m buffer will reduce the overall development capacity through both overall floorspace limitation and through a potential impact on feasibility. Additionally, this is likely to have some (albeit minimal given the extent of MDRS capacity throughout the city) impact on the relative underlying land value of the affected sites. With respect to the impacted development capacity included in Mr Scallan's evidence, in context this represents an impact of just over 1% of the feasible MDZ residential capacity.
- 7.6.3 Mr Osborne considers that at a high level the economic benefits associated with the interface involves the safeguarding of industrial activity within the sites that abut residential zones that would otherwise have MDRS provisions applied. The industrial sectors within Christchurch City contribute significantly to the city's economy and the safeguarding of these sites for industrial businesses not only provides for the existing uses but affords certainty to the sector in terms of business operations.
- 7.6.4 I accept this advice.

7.7 INDUSTRIAL INTERFACE QM - ANALYSIS OF SUBMISSIONS AND FURTHER SUBMISSIONS

7.7.1 A complete list and brief summary of all the submissions on the Industrial Interface QM, and my overall recommendation on each submission, is attached as Appendix A.

Issue 1 – Removal of QM

7.7.2 Regarding submission **S116.4 – 116.6** from **Russell Fish**, this submitter outlines concerns that the Industrial Interface QM would create a burden on residential activities to mitigate industrial noise effects, would lead to reduced compliance by industrial activities in containing and mitigating their adverse effects on adjoining residential zones, and it would create inferior low-density development surrounded by industry and high-rise development.

7.7.3 I will firstly respond to the comments relating to the responsibility of managing industrial noise effects. As set out in further above, while the Plan sets specific noise limits for industrial zones, the residential noise limits must be complied with where industrial noise is received within residential zones. As set out in the AES report by Jeremy Trevathan (Appendix 39 attached to the Part 2 s 32 report), the onus is on industrial activities to manage noise emitted over residential properties and the noise limits are in line with best practice.

7.7.4 The proposed QM does not seek to alter the noise limits set out in the Plan. Rather it seeks that new residential development within 40m of an industrial zone be limited to 7m/two-storeys to ensure that industrial activities that do not currently exceed the residential noise limits in the Plan do not become non-compliant despite not increasing their noise emissions. The QM controls are similar to the building heights currently enabled in the Plan, and would still allow for increased density i.e. three units on three sites, just to a lesser height, or a greater height via resource consent assessed on a case-by-case basis. The responsibility would still land on industrial activities to meet the unchanged residential noise limits in residential zones. I consider that this is an appropriate balance to manage effects on residential activities and reverse sensitivity effect on industrial activities.

7.7.5 Turning to the concern around visual amenity of a low-density development pattern amongst high-density uses where adjoining the industrial interface, as noted above the QM will still allow for the density envisioned under MDRS and Policy 3 with the impact relating to height only. This may result in development being restricted in number of bedrooms or reducing the number of apartments in apartment buildings, unless resource consent is obtained. In terms of the character and amenity

resulting from the QM, the reduction of one-storey is not considered to unduly impact on amenity of residential areas. I consider the city has many residential areas where three-storey development is likely to be more desirable than adjoining industrial zones and where there is more demand because of higher levels of amenity. I do not agree with the submitter that lower buildings equate to lower amenity. More specifically, lower amenity would be created if people were exposed to a higher level of effects by enabling more development closer and overlooking industrial zones. I consider that removing the Industrial Interface QM would result in the costs outweighing the benefits, with potential for effects on residential activities and reverse sensitivity effects on industry.

7.7.6 In respect to submission **S399.3, S399.4** of **Peter Earl**, this submitter is concerned that introducing the QM would reduce housing choice, 'making it more difficult for people to live close to work, forcing them to drive, which contributes to noise in and of itself, wastes land, increases infrastructure costs, and increases pollution', and therefore opposes restricting heights near industrial zones.

7.7.7 I note proposed *Strategic Objective 3.3.7 Well-functioning urban environment* seeks a well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future. The QM seeks to address potential effects of establishing residential development of three-storeys or above at the interface of industrial zones where currently compliant levels of noise would no longer comply with the residential standards due to a new measurement location at third storey level plus. In my view the proposed QM is appropriate and would still allow for a greater density within the 40m buffer, either below three-storey level or via a resource consent where each proposal is assessed on its merits and each specific context is considered. I consider this to be an appropriate balance of costs and benefits.

7.7.8 Lastly, **Kāinga Ora's** submission points **S834.87 – 834.90, S834.166, S834.167, S834.166, S834.167, S834.166, S834.169, S834.171, S834.179, S834.184** seek that this QM is deleted and effects are managed where necessary through noise controls and acoustic and ventilation requirements as opposed to the proposed controls. The submission also comments that the current function of many industrial general zone areas that are located in primarily residential areas would no longer meet the definition of 'industrial activity' and suggests a commercial mixed use zoning may be more appropriate. Kāinga Ora considers that effects from industrial activities should first be mitigated at the source and comments that the interfaces are already existing, with the Plan having

long zoned industrial areas adjacent to residential zones for light industrial activity. They also comment that industry is required to meet residential zone standards relating to noise or glare at the zone boundary.

- 7.7.9 With respect to Kāinga Ora’s comment about non-industrial activities establishing in industrial zones, I consider that if the QM is removed future industrial activities establishing as a permitted activity could result in reverse sensitivity effects where three-storey residential development creates a new receiving environment. Where development at a three-storey level is proposed within the 40m buffer, it would be assessed on its merits through a resource consent application.
- 7.7.10 In relation to the suggestion to change industrial zones to mixed use, the submitter has not provided evidence to support the request. In my view this zoning would not be appropriate as it would allow for residential activities within industrial zones (above ground level). For instance, the Plan sets a lower noise limit for residential zones to allow for an acceptable level of amenity given the more sensitive uses.
- 7.7.11 Turning to Kāinga Ora’s points around zoning for light industrial activity, and applicability of the residential noise standards at the boundary, as set out in Mr Trevathan’s report in Appendix 39⁶ attached to the Part 2 Qualifying Matters 32 report, enabling residential dwellings to be constructed up to three-storeys in height may mean that: the upper levels of new dwellings ‘overlook’ industrial activities to a greater extent, and do not benefit from the screening of typical boundary fences, or intervening buildings; and as NZS6802:2008 requires assessment of compliance at 1.2 – 1.5 metres above any floor level of interest, there may be receiving environments created which receive higher noise levels than in the current situation, and this may result in currently complying levels of noise from industrial activities exceeding the noise limits. The modelling undertaken (in Appendix 40⁷ attached to the Part 2 Qualifying Matters 32 report), demonstrates that the 40m buffer was shown to be adequate to ensure compliance at the upper level of dwellings with zero screening. Proposed *Objective 14.2.12* and *Policy 14.2.12.1*, and the discretionary activity status for residential development three-storeys and above seek to manage

⁶ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/PC14-Notification-QM-Industrial-interface-AES-Report-s 32-Appendix-39-v2.PDF>

⁷ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/PC14-Notification-QM-Industrial-interface-AES-Memo-s 32-Appendix-40.PDF>

this potential for effects within the 40m buffer as well as reverse sensitivity effects on industrial activities.

7.7.12 I note that the costs and benefits of including the buffer, or not including the buffer and enabling full development within the sites have already been assessed in the S 32 report, and I agree with them.

Recommendation

7.7.13 I consider that submission **S116.4 – 116.6** from **Russell Fish**, should be rejected for the reasons set out above.

7.7.14 In my view, submission **S399.3, S399.4** of **Peter Earl**, should be rejected for the reasons above.

7.7.15 For the reasons set out above, I recommend the Kāinga Ora submission points S834.87 – 834.90, S834.166, S834.167, S834.166, S834.167, S834.166, S834.169, S834.171, S834.179, S834.184 be rejected.

Issue 2 – More controls under QM

7.7.16 In her submission **S734.7**, **Marie Byrne** seeks that this QM is increased to be a block from the industrial areas to residential areas. The submitter considers industrial activity affects more than one property, and notes properties on rear sections are not included.

7.7.17 I note the QM is on the basis that the upper levels of new three-storey houses which would be enabled by PC14 might now overlook industrial areas, whereas before lower houses were screened. In line with NZS6802:2008, the upper façade would become a new compliance assessment location. Mr Trevathan comments that there is no basis from a noise point of view to extend a buffer to cover entire legal 'sites', as noise is not constrained by site boundaries. The modelling undertaken as part of the s 32 analysis (refer to Appendix 40 of the Part 2 Qualifying Matters s 32 report) outlines that the extent of the elevated noise area at the third-floor level height depends on the site layout, how much screening is currently being provided, and the distance between the source and the residential boundary. The modelling indicated that a 40m buffer distance is appropriate, and beyond 40m the potential for an elevated noise area at third storey level is significantly reduced. In my view, expanding the buffer as requested would result in unnecessary costs, hindering development opportunity with little, if any, benefit. I consider the 40m buffer is the most appropriate option, given that it better balances the costs and benefits and

would be more effective at managing adverse effects on residential activities and reverse sensitivity effects on industry.

Recommendation

7.7.18 In my view, submission **S734.7** from **Marie Byrne** should not be accepted on the basis of the above.

Issue 3 – Site and area specific changes relating to QM

7.7.19 In his submission **S2.7 – 2.13**, **Greg Olive** seeks that this QM is removed from the property at 419 Halswell Junction Road given that the dominant source of noise is road noise from the motorway and a high degree of mitigation is required in the Plan or as modified by Plan Change 5E, due to proximity of this infrastructure. The property and surrounds can be seen in **Figure 1** below. Under PC14 the submitter’s property is proposed to be rezoned to MRZ and the Industrial Interface QM is proposed to apply measured 40m from the Industrial Park zone boundary.



Figure 1. Submitter’s property at 419 Halswell Junction Road (centre of image). The site is within the Residential New Neighbourhood Zone (shown in orange) and the Residential Suburban Zone

(shown in yellow). The properties to the north east are zoned Industrial Park (shown in purple). The State Highway 76 designation is shown in the blue overlay.

7.7.20 Mr Trevathan's evidence details that the submitter's site has unique circumstances, including that the 40-metre Industrial Interface buffer would cover very little of the site if not for the P23 Designation associated with the Southern Motorway being zoned Industrial Park (not Transport Zone), and that the most relevant Industrial Park zone site is not yet fully developed. Mr Trevathan comments that industrial activities therefore are currently not generating noise exceeding the District Plan limit at any location on the submitter's site, and if higher noise Industrial activities were legally established on the Industrial Park site before residential development was completed on the submitter's site, it is correct that the traffic noise insulation requirements would ensure third storey habitable spaces overlooking Halswell Junction Road would be sufficiently insulated.

7.7.21 I note that *Rule 6.1.7.2.1 Sensitive activities near roads and railways* includes requirements for acoustic insulation within a buffer distance of 80m from the boundary of state highway (under Plan Change 5E the 80m distance changes to 100m). Resource consent is required as a restricted discretionary activity where the noise limits are exceeded by 10 dB or less, and a non-complying activity status applies where it goes beyond 10 dB. The rule contains exceptions including certain rooms (such as bathrooms, stairwells etc.), where the road traffic noise is less than 57 dB LAeq (24h), or line of sight is blocked from the nearest facade which is at least 50m from state highways. I am mindful that this assessment only measures road noise and does not need to account for any industrial noise received on residential sites. In the case where road noise is less than that indicated above, acoustic insulation would not be required. Therefore, there is potential that three-storey development may not be required to provide insulation if the exceptions in *Rule 6.1.7.2.1* are met.

7.7.22 I have turned my mind to whether a permitted activity status could be introduced allowing for three level dwellings within the 40m buffer where industrial noise achieves the residential standards at the third storey level. However, as set out in Appendix 40 of Part 2 Qualifying Matters s 32, Mr Trevathan comments '[e]ven identifying 'existing industrial sources' may be challenging for an acoustic engineer engaged by a third-party residential developer – i.e. understanding what the neighbouring industrial businesses do, and when and how they may generate noise. Often noise emissions may be different day to day during the week, or periodic or seasonal – and that may not be obvious during a one-off site visit.' I therefore consider there is insufficient evidence to recommend removal of the qualifying matter from the property. If three-storey development was proposed within the 40m buffer, the proposal would be considered on its merits via a resource consent application.

- 7.7.23 Turning to the **Ravensdown Limited** submission **S243.1, S243.5, S243.6**, Ravensdown has concerns about providing for residential intensification within the proposed High-density Residential Zone (**HRZ**) to the southwest and south of Ravensdown's 'Christchurch Works', being a site at 312 Main South Road zoned Industrial Heavy (**IHZ**) which manufactures superphosphate and supplies other fertilisers products. Ravensdown seek that that this land is rezoned to Medium Density Residential. They also seek the inclusion of a rule whereby permitted residential development within a 'buffer area' between industrial and residential interface, must be the lesser of 7m or 2-storeys and include a rule requiring acoustic insulation to be installed in all residential developments, within the specified buffer area from industrial zones. Lastly, they seek that where the IHZ immediately adjoins a residential zone, a 240m IHZ / residential interface buffer is applied from the IHZ boundary over adjoining residential zones. This proposed buffer accommodates PC14's proposed 40 metre noise related Industrial General Zone (IGZ) / residential zone 'buffer', plus provision of an additional 200 metres to reflect the approximate depth of parts of the IGZ in Hornby where it adjoins an IHZ.
- 7.7.24 They comment that the development of the QM was based on an assessment of potential noise effects on the MDRS, not the HRZ. The development of the QM did not consider the IHZ and residential zone interface, on the basis that the Industrial General Zone tends to buffer residential areas from IHZ. There is no IGZ providing a buffer between the Christchurch Works' IHZ zoning on the residential zoning to the southwest and south of the site.
- 7.7.25 With respect to the request to change the zoning from HRZ to MRZ adjoining the IHZ, and the inclusion of a 240m buffer, Mr Trevathan comments that noise generated within both the IHZ and the IGZ is required to comply with the same limits at the residential interface, and differences in screening and changes with noise levels with height are reduced for greater distances between source and receiver. He considers the issues the QM seeks to address are therefore not dependent on the proximity or otherwise of the IHZ or height of dwellings permitted in the residential area. He also comments that the 40m buffer was shown in the modelling to be adequate to ensure compliance at the upper level of dwellings with zero screening. It makes no difference if the 'upper level' is the third or fourth level, so the absence of an intervening IGZ zone is not of concern from that perspective. I therefore consider that the proposed 40m buffer along this interface will appropriately deal with concerns of reverse sensitivity resulting from noise emissions which currently comply with the Plan however may not comply at the third or fourth storey level of adjoining residential development. I consider the 40m buffer to be the most appropriate option given that it provides a better balancing of the costs and benefits.

- 7.7.26 Ravensdown also requests a rule requiring acoustic insulation to be installed in all residential developments within the specified buffer area from industrial zones. I note it is proposed that where residential development above 7m/two-storeys is proposed within the 40m buffer, resource consent would be required for a fully discretionary activity. This allows for consideration of all effects within the scope of the objectives and policies. Proposed Policy 14.2.12.1 provides a pathway where 'mitigation sufficiently addresses effects' which could include acoustic insulation. In essence, provision of acoustic insulation has already been anticipated in the framework, without being the need to restrict to one means of mitigation. It is noted that where acoustic insulation is proposed for three-storey development within the buffer, technically industrial activities could still be rendered non-compliant in noise emissions as NZS6802:2008 measures compliance on the façade of the floor level of interest, rather than internally. Mr Trevathan comments in some situations acoustic insulation would not be required, and so a blanket requirement as requested by the submitter is not appropriate. I accept this advice. I consider a requirement for acoustic insulation would result in unnecessary costs given that it may not be needed, and therefore is most efficient to consider this as mitigation on a case-by-case basis through a resource consent.
- 7.7.27 With regard to the **Marc Duff** submission **S788.3, S788.9**, the submitter raises concern of including high-density housing around industrial areas in Hornby and is particularly concerned with the proposed High-density Residential Zoning adjoining the Ravensdown fertilizer factory. Mr Trevathan comments on this matter are addressed under the Ravensdown submission above. I consider that the proposed 40m buffer along this interface will appropriately deal with concerns of reverse sensitivity resulting from noise emissions which currently comply with the Plan however may not comply at the third or fourth storey level of adjoining residential development.
- 7.7.28 **The Catholic Diocese of Christchurch** submission **S823.206** seeks that the planning maps are amended to identify a Brownfield Precinct overlay, over the Industrial General zoned school site (2 Lydia Street, Papanui), and that the Industrial Interface overlay is removed for those properties with frontage to Northcote Road or Lydia Street. They comment that the majority of this Industrial General zoned land is being developed for the new Marian School campus in accordance with the designation that applies to the land. The suggested Brownfield overlay would recognise the attributes of the land and that any use of surplus school land may be appropriate for residential development. They also question the appropriateness of the Industrial Interface overlay applying to those sites along Lydia Street and Northcote Road, given that they will be adjoining a school and supermarket rather than industrial activities which the interface overlay is intended to address. I note the supermarket they refer to is located at 165 and 171 Main North Road and 7, 7A, and 7B

Northcote Road. Refer to **Figures 2** and **3** below which indicates the location of these properties. **Figures 4** and **5** are the approved site plans for Marian College and the supermarket.

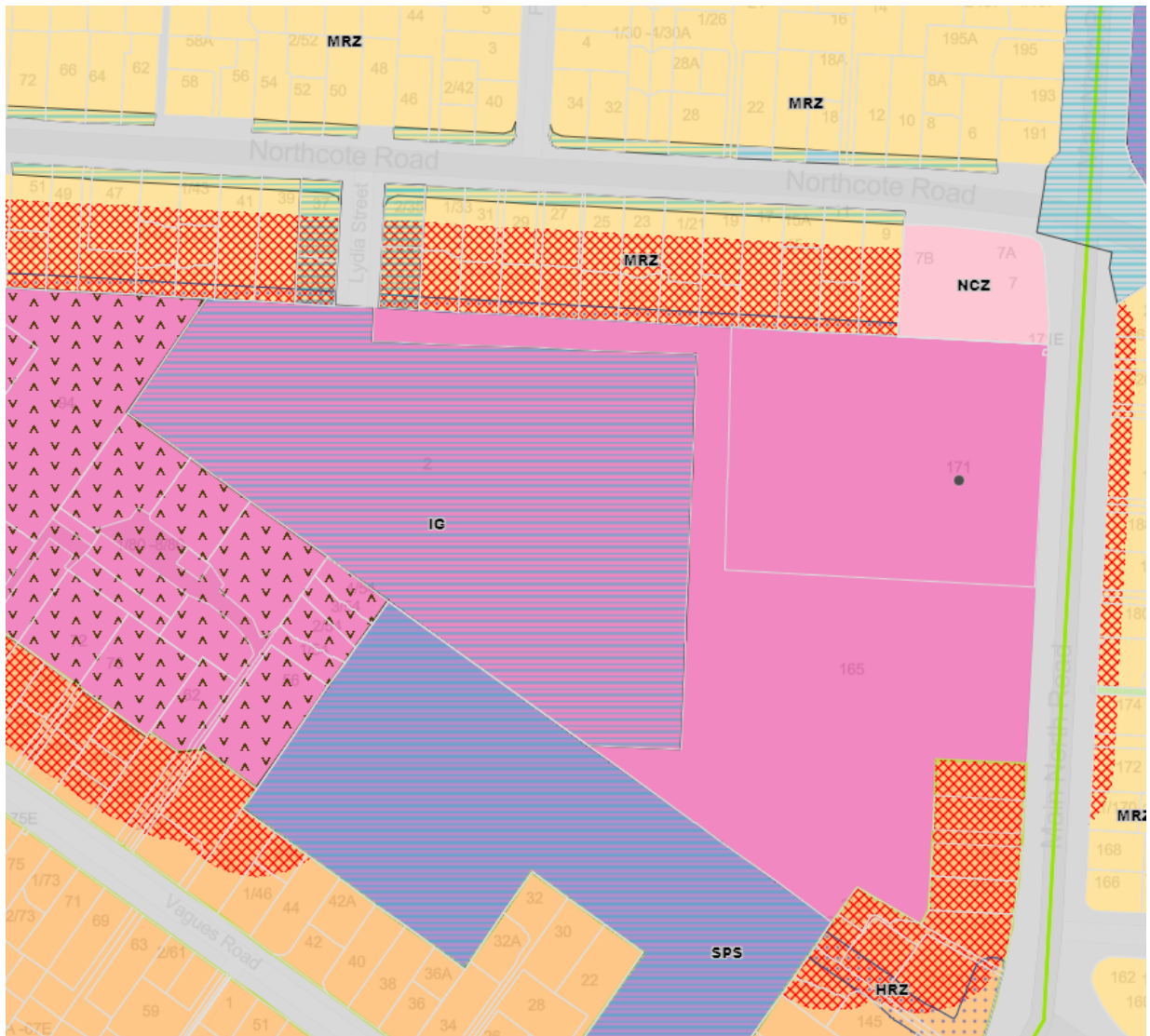


Figure 2. The Marian College site is shown in pink (zoned Industrial General) with a purple overlay (being the designation) and the supermarket site is shown in pink to the right. The Industrial Interface Qualifying Matter is shown in red hash.

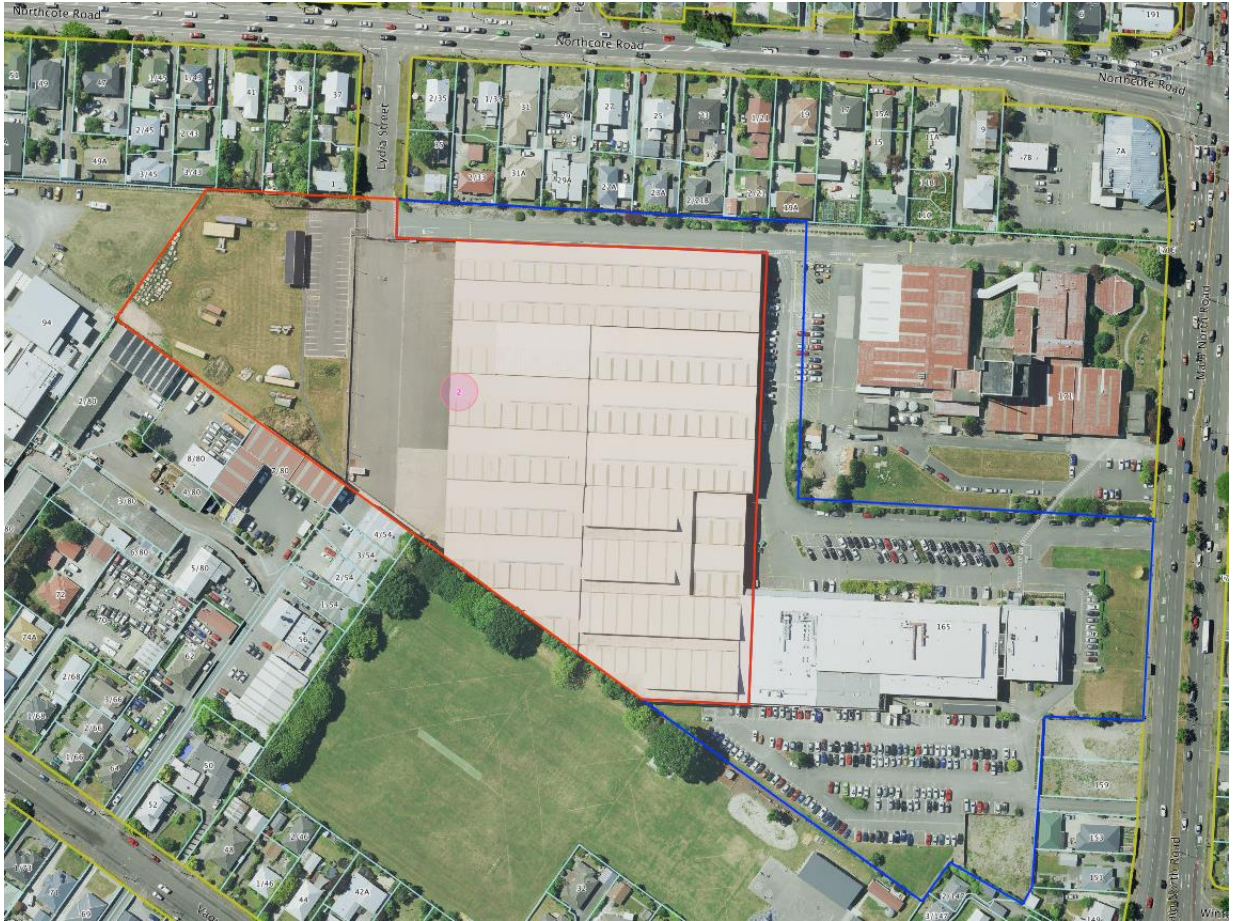


Figure 3. Marian College shown in red outline and supermarket site shown in blue outline

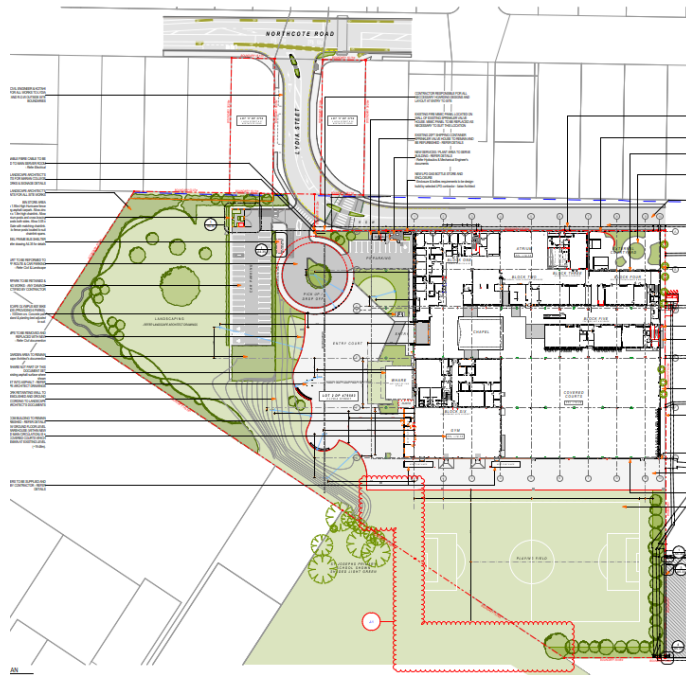


Figure 4. Marian College site plan

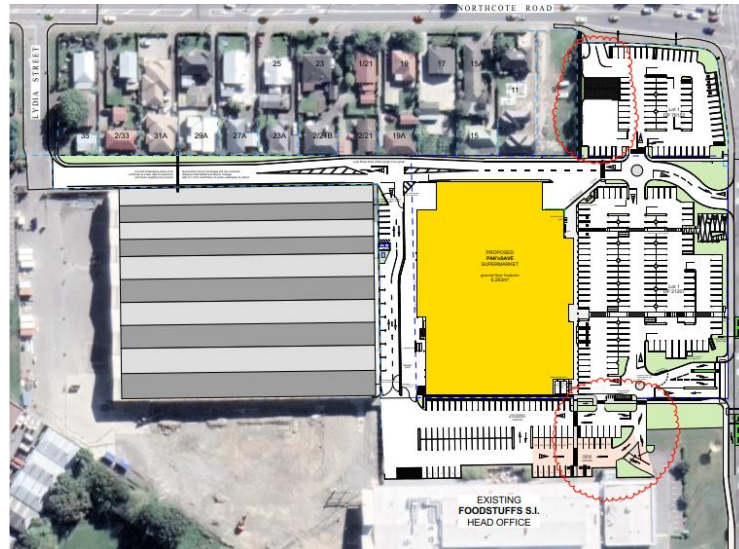


Figure 5. Supermarket site plan

- 7.7.29 Turning firstly to the Brownfield Precinct overlay request, this has been addressed in the PC14 Commercial s 42A Report prepared by Mr Kirk Lightbody. His recommendation is to accept this submission point.
- 7.7.30 I note the designation (L226) contains specific noise requirements. Furthermore, any noise from the school on adjoining residential properties would need to meet the residential noise limits in the Plan, as would the supermarket. Should residential development adjoining the school be constructed at three-storey level, as with the industrial zoned activities, there would be a new receiving environment at the third storey level.
- 7.7.31 Mr Trevathan has reviewed this submission and comments that supermarket noise sources are very similar to many industrial activities – heavy delivery vehicles, roof-mounted refrigeration plant and could therefore generate a non-compliance at the upper levels of dwellings. For the school, he indicates that the issue of noise emissions would be less likely, unless the site was arranged with utilities areas close to the residential boundary. I note the Diocese do not explicitly request that the buffer is removed for the properties adjoining the supermarket site, only the school site.
- 7.7.32 Proposed *Objective 14.2.12* and *Policy 14.2.12.1* seek to manage reverse sensitivity effects on industrial activities, and the Plan definition of industrial activities does not include schools. As can be seen in **Figures 2-5** above, there is a vehicle access for the supermarket that extends over two thirds of the northern boundary with the school site, with only three residentially zoned properties directly adjoining the designated school site. One of these residentially zoned properties also falls within the school designation and will adjoin a parking area buffered by some landscaping. The

parcels for 311-321 Port Hills Road (currently zoned Residential Hills) which could result in three-storey development at the south-western end of these properties, arising in potential reverse sensitivity effects. LPC therefore seek that the QM is extended to the full spatial extent of these properties as set out in Appendix 3 of their submission (refer to purple extent in **Figure 6** below).

Figure 6. Requested extent of qualifying matter over residential properties shown in purple

- 7.7.36 I note the Residential s 42A report recommendation is to remove the Residential Hills zone entirely and replace this with the Medium Density Residential Zone. These properties would then become zoned Medium Density Residential. The QM proposes a 40m buffer where development of three or more storeys requires resource consent as a discretionary activity, whereas instead of a 40m buffer, LPC seek that this qualifying matter cover the entire property parcels at the abovementioned properties adjoining the City Depot.
- 7.7.37 Mr Trevathan has reviewed this submission and indicates there is no basis from a noise point of view to extend a buffer to cover entire legal 'sites', as noise is not constrained by site boundaries. The 40m buffer is in response to the relative increase in difficulty screening 1 storey dwellings compared to 3 storey dwellings. If in both cases the dwellings are elevated and overlooking the noise sources (as is potentially the case for Port Hills Road) the same logic applies (3 storey dwellings will be more difficult to screen than on a flat site, but then again, so will 1 storey dwellings) – and therefore he does not recommend a change in approach.
- 7.7.38 With respect to the elevation of the sites, Mr Trevathan outlines that while the topography in this specific area may mean the dwellings are elevated compared to noise sources, the QM seeks to address the difference which there may be between current residential development, and new three-storey dwellings. For dwellings which are situated on elevated topography in either case, he considers the difference (and therefore the response – a 40 metre buffer) is similar. In his view there is no technical basis from a noise point of view to align the buffer with site legal boundaries, as the modelling confirmed that the issue which the QM seeks to address typically does not exist beyond 40 metres from the source.
- 7.7.39 I accept Mr Trevathan's advice. I consider that expanding the buffer to the entirety of these property parcels would result in unnecessary costs, hindering development opportunity with these sites with little benefit. I consider the 40m buffer is the most appropriate option in this case, given that it better balances the costs and benefits and would be more effective at managing adverse effects on residential activities and reverse sensitivity effects on the City Depot.

Recommendation

- 7.7.40 Firstly, with respect to submission **S2.7 – 2.13**, by **Greg Olive**, in my view this request should be not accepted given that the QM is still considered to be justified in this location for the reasons set out above.
- 7.7.41 The **Ravensdown Limited** submission **S243.1**, which seeks the rezoning of HRZ to MRZ to the southwest of their site at 312 main South Road, in my view should be not accepted for the reasons given above.
- 7.7.42 Turning to the **Ravensdown Limited** submission **S243.5**, seeking the notified QM height limit plus acoustic installation to be installed in all residential developments, within the buffer, I consider, for the reasons outline above, that this not be accepted.
- 7.7.43 In my view the **Ravensdown Limited** submission **S243.6**, seeking a 240m Industrial Heavy zone / residential interface buffer should not be accepted for the reasons set out above.
- 7.7.44 For the reasons set out above I consider the **Marc Duff** submission **S788.3, S788.9** should not be accepted.
- 7.7.45 Turning to **The Catholic Diocese of Christchurch** submission **S823.206**, based on the assessment above I recommend this submission is not accepted.
- 7.7.46 With respect to the **LPC** submission **S853.12**, I recommend that it not be accepted.

Issue 4 - specific changes to proposed QM provisions

- 7.7.47 **The Fuel Companies'** submission **S212.10, S212.11** seeks changes to *Objective 14.2.12*, replacing it with 'New residential development is compatible with existing lawfully established industrial activities'. They furthermore seek the following changes to *Policy 14.2.1.2.1 'a*. Restrict new residential development of three or more storeys within proximity to **existing lawfully established industrial activities and** industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or **compromise** adversely affect the **amenity**, health and safety of residents, unless mitigation sufficiently addresses the effects'. While supportive of the objective, they seek amendments to acknowledge that residential developments can be susceptible to other effects (e.g. visual, odour, lighting) in addition to noise effects, and would apply to lawfully established industrial activities in non-industrial zones and where potential effects on residential developments and reverse sensitivity effects are also likely to occur. They also seek removal of

terms ‘adversely affected’ and ‘does not affect’ as they are more relevant to determining adverse effects for the purposes of Section 95 of the Act. Similarly, while supportive of the policy, they seek amendments to acknowledge that existing industrial activities not located in industrial zones should similarly be protected from the effects of reverse sensitivity, to replace the term ‘adversely affect’ and ensure the amenity of residents is also protected.

7.7.48 Turning firstly to the request for the inclusion of existing lawfully established industrial activities in the objective and policy, this QM as proposed only applies to residential properties adjoining industrial zones, it does not apply to residential properties adjoining other zones where lawfully established industrial activities have been operating. As set out in section 6.22 of the Part 2 Qualifying Matters s 32 report⁸, the noise limits in the Plan apply to the receiver of noise, therefore a lawfully established industrial activity in a non-industrial zone adjoining residential properties would need to comply with the residential noise limits where the noise is received within residential properties. The potential for reverse sensitivity effects in enabling three-storey development (and therefore a new receiving environment), could equally apply in these situations as for industrial activities in industrial zones. As with the industrial zones, the issue of potential noise reverse sensitivity effects at the third storey may likely not occur in a number of situations and in the case of industrial activities in non-industrial zones, it would potentially be most appropriate to assess this on a case-by-case basis. No submissions have been received requesting the mapped extent of the Industrial Interface Qualifying Matter be extended to include existing lawfully established industrial activities in non-industrial zones.

7.7.49 With respect to the request that the Objective include consideration of more than noise effects, as set out in section 6.22 of the Part 2 Qualifying Matters s 32 Report, noise received at the third storey level is the main concern arising from allowing for residential intensification at the interface. While the s 32 Report does not go into detail on other effects of industrial activities on residential development, I consider the current controls in the Plan (and those effects managed by the Regional Council) are still relevant and applicable.

7.7.50 The industrial chapter of the Plan includes controls to manage the effects of industrial activities on adjoining residential zones. This chapter includes specific controls where industrial zones are in proximity to residential zones, including road and boundary setbacks, recession planes, outdoor

⁸ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

storage of materials, and landscaping. The Industrial Interface QM does not seek any changes to the industrial chapter controls, which would not be considered within scope of the IPI. The Plan also manages industrial activities with respect to light spill, earthworks and transport (trip generation). Effects generated within the Transport Zone are not managed under the Plan. In my view allowing for greater density at the interface with industrial zones would not likely necessitate a change to rules protecting visual amenity and traffic. The Regional Council manages discharges such as odour, and any other effects within their function set out in s30 of the Act.

- 7.7.51 With respect to the request that ‘adversely affect’ in *Policy 14.2.12.1* is changed to ‘compromise’, I am minded to recommend retaining the proposed wording and include ‘significant’ preceding ‘adversely affect’ acknowledging the Plan does allow for some level of noise effects in setting the residential noise limits. Regarding the request that the word ‘amenity’ is included in the policy, I consider this would be in line with the intent of the QM to protect the amenity of residents and therefore minimizing potential for reverse sensitivity effects.
- 7.7.52 An evaluation of the proposed changes was carried out in accordance with RMA s 32AA. The analysis, as shown in **Table 2** below, concludes that the changes do not affect the s 32 evaluation conclusions and the proposed policy amended as a result of submissions are still the most appropriate way to achieve the objectives of the Plan.

Table 2 - s 32AA evaluation of recommended changes

Proposed amendments (in purple bold underline) to PC14 Industrial Interface provisions	Effects and evaluation of change
<p><u>14.2.12.1 Policy – Managing effects on industrial activities</u></p> <p><u>a. Restrict new residential development of three or more storeys within proximity to industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or significantly adversely affect the health and safety of residents, unless mitigation sufficiently addresses the effects.</u></p>	<p>It is considered that there is no significant effect in terms of the s 32 evaluation.</p> <p>The change is minor in nature and accounts for the fact that the Plan does envisage some extent of noise emissions over residential zones in setting the residential noise limits. This change is considered to be more efficient and effective than the notified version of the policy and is the most appropriate way to give effect to the objectives of the Plan.</p>
<p><u>14.2.12.1 Policy – Managing effects on industrial activities</u></p> <p><u>a. Restrict new residential development of three or more storeys within proximity to industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or adversely affect the amenity, health and safety of residents, unless mitigation sufficiently addresses the effects.</u></p>	<p>It is considered that there is no significant effect in terms of the s 32 evaluation.</p> <p>The change is minor in nature and acknowledges that the impact of noise emissions on residential amenity is one effect that may result from the operation of industrial activities at the interface. This change is considered to be more efficient and effective than the notified version of the policy and is the most appropriate way to give effect to the objectives of the Plan.</p>

7.7.53 **Ravensdown Limited** in **S243.3** seek that proposed *Objective 14.2.12* is amended so that it recognises the full suite of potential effects from industrial activities on new residential development, not just noise. I consider that the response to the Fuel Companies’ submission S212.10, S212.11 above equally applies here.

7.7.54 **Lyttelton Port Company Limited (LPC)**, in **S853.15** and **S853.16**, comment that PC14 has failed to introduce rules to restrict residential intensification within the industrial interface for the Residential Hills Zone. They state that an equivalent built form standard to Rule 14.4.2.2 (v) (control on development being 7m/2 storey) applying to Residential Hills (RH) Zone on the other side of Port Hills Road would address LPC’s concerns. I note the s 32 report is on the basis that this QM applies to ‘residential properties’ and does not explicitly list specific residential zones. The notified plan change includes the Industrial Interface QM height/storey limit in the Residential Suburban (RS), Residential Suburban Density Transition (RSDT), MRZ and HRZ, though not for the RH Zone. The Residential s 42A report recommendation is to remove the RH zone entirely and replace this with the MRZ. The buffer would then extend over properties previously zoned RH, ensuring that any development three-storeys or above would require resource consent and be assessed on a case-by-case basis.

- 7.7.55 I am mindful that applying the Industrial Interface QM to the RS, RSDT and RH zones would result in PC14 including provisions that are more onerous than the Plan. Furthermore, the 7m height limit as a permitted activity is also more onerous than the 8m allowance in the Plan.
- 7.7.56 In considering the changes proposed through PC14 relating to this topic I have considered the key findings of the Environment Court in *Waikanae Land Co*⁹, that it is ultra vires to section 80E RMA (Meaning of intensification planning instrument) for an Intensification Planning Instrument (IPI) to introduce restrictions to currently permitted activities unless the change is clearly consequential to the introduction of MDRS. I am aware that this decision is particular to its own facts and that it has been appealed to the High Court, however the broad principles it confirms seem generally applicable to PC14.
- 7.7.57 Taking into account the above, I have taken the approach that changes to the status quo that preclude or limit activities when compared with the Plan are potentially ultra vires if they are promoted through an IPI rather than a schedule 1 process. I recommend that the Industrial Interface QM provisions and mapping is removed from any RS, RSDT, or RH zones that are proposed to remain through the Panel's recommendations. I also recommend that the 7m height requirement is changed to 8m in the MRZ and HRZ. This recognises that imposing reduced height limits would reduce what could be undertaken as of right in the existing zone.
- 7.7.58 Notwithstanding the abovementioned Waikanae matters, I am minded to nevertheless recommend that this QM is not applied to the RS, RSTD and RH zones. I have weighed fairness to existing property owners against the benefits to be gained from inclusion of the setback in the residential zones that are not being proposed to become MRZ or HRZ. Within these low-density zones, whilst there is an 8m height limit and resource consent would be required as a restricted discretionary activity to exceed this limit, the assessment matters do not include consideration of potential amenity and reverse sensitivity effects where development would adjoin industrial zones. There could therefore be scenarios in these low-density zones where three storey development is established via resource consent in locations where elevated noise levels may result in adverse effects. This is a potential issue with the current District Plan and would not be worsened by PC14 in these areas where the low-density zoning remains the same. In my view adverse effects that could arise due to future three storey development at the interface of

⁹ Decision No. [2023] NZENVC 056 *Waikanae Land Company Vs Heritage NZ Pouhere Taonga, Kapiti Coast DC, Atiawa Ki Whakarongatai CT*.

industrial zones and low-density zones would be better addressed as a separate plan change, if considered necessary, and would require further supporting evidence and assessment.

7.7.59 Similarly, regardless of the matters raised in Waikanae, I consider that the proposed height limit of 7m/two-storey should be increased to 8m/two storey for the MRZ and HRZ. In my view the difference of 1m is minimal, it would allow for two storey buildings to have a slightly greater height allowance, and the outcome sought by the provisions will still be achieved with any development over two storey not being permitted as of right, noting the rule would state '8m/two storey whichever is the lesser'.

7.7.60 The recommended changes are included in Appendix B.

Recommendation

7.7.61 With respect to **The Fuel Companies'** submission **S212.10**, where it seeks changes to *Objective 14.2.12* to include lawfully established industrial activities in non-industrial zones, given the QM does not extend to these activities in non-industrial zones, the mapped extent remains as proposed, and the lack of evidence to extend the QM, I recommend this request is not accepted.

7.7.62 Regarding **The Fuel Companies'** submission **S212.11**, where it seeks changes to *Policy 14.2.12.1* to include lawfully established industrial activities in non-industrial zones, given the QM does not extend to these activities in non-industrial zones, the mapped extent remains as proposed, and the lack of evidence to extend the QM, I recommend this request is not accepted. With respect to the request that *Policy 14.2.12.1* is updated to remove 'adversely affect' and replace it with 'compromise', I recommend not accepting this request and instead including 'significant' preceding 'adversely affect' acknowledging the Plan does allow for some level of noise effects in setting the residential noise limits. Lastly, I recommend accepting the request that the word 'amenity' is included in the policy. The proposed changes are shown below in purple. Therefore overall, I recommend this submission be accepted in part.

14.2.12.1 Policy – Managing effects on industrial activities

a. Restrict new residential development of three or more storeys within proximity to industrial zoned sites where it would give rise to **reverse sensitivity** effects on **industrial activities** and/or **significantly** adversely affect the **amenity**, health and safety of residents, unless mitigation sufficiently addresses the effects.

7.7.63 I consider submission **S243.3** from **Ravensdown Limited** should be not accepted given the Plan currently manages effects of industrial activities on adjoining residential properties and the increase in density enablement is not considered to necessitate a change to these rules under this IPI.

7.7.64 In my view, submission **S853.15** and **S853.16** from the **Lyttelton Port Company Limited (LPC)** should be not accepted given that the Residential Hills Zone is proposed to be replaced with MRZ. For the reasons set out above I propose removing the QM (both in terms of mapped spatial extent and provisions) over any RS, RSDT and RH Zones that prevail in the Panel’s recommendation, and to replace the 7m height requirement with an 8m requirement in the MRZ and HRZ, to ensure the QM does not impose controls more onerous than that of the Plan.

Residential Suburban and Residential Suburban Density Transition Zone

14.4.2.3 Building height

a. The maximum height of any building shall be:

	Activity / area	Standard
v.	Any building for a residential activity within the Industrial Interface Qualifying Matter Area	7 metres or 2 storeys, whichever is the lesser

Medium Density Residential Zone

14.5.2.3 Building height

a. The maximum height of any building shall be:

	Activity / area	Standard
iv.	Any building for a residential activity within the Industrial Interface Qualifying Matter Area	7-8 metres or 2 storeys, whichever is the lesser

High Density Residential Zone

14.6.2.1 Building height

c. **Buildings** for a **residential activity** within the Industrial Interface Qualifying Matter Area must not exceed **7-8** metres in height above ground level or two storey, whichever is the lesser.

8 PLAN CHANGE 14 – SIGNIFICANT AND OTHER TREES QM

8.1 OVERVIEW

- 8.1.1 This s 42A report covers the Significant and Other Trees (non-heritage trees) QM, and the Significant and Other Trees (s6 heritage trees) Qualifying Matter. The Significant and Other Trees in Appendix 9.4.7.1 that meet s6(f) in terms of the heritage criteria are assessed under s77J, and s77P of the Act. The trees within Appendix 9.4.7.1 which do not meet the s6 heritage criteria are assessed under s77J, s77L, s77P, and s77R of the Act.
- 8.1.2 PC14 proposed *Strategic Objective 3.3.7 Well-functioning urban environment* is applicable noting it requires a well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future. The objective specifically includes recognizing and providing for the benefits of urban environments that support reductions in greenhouse gas emissions, and are resilient to the current and future effects of climate change.
- 8.1.3 The schedule in Appendix 9.4.7.1 of the Plan is proposed to be updated to identify the relevant scheduled trees on private land which are also identified as QMs for the purpose of amending the permitted MDRS building height and density requirements in the medium and high-density zones. While all proposed QM trees are scheduled trees, not all scheduled trees are identified as QM trees. It is proposed that the current standards in sub-chapter 9.4, with some amendments, will apply to QM trees. Standards in sub-chapter 9.4 will not apply to works to a scheduled tree that has not been identified as a qualifying matter tree, and which are in relation to a permitted development or subdivision activity in the medium or high-density residential zones.
- 8.1.4 In addition, it is proposed to replace ‘dripline’ with a ‘tree protection zone radius’ and include a new definition which means the protection area around a scheduled tree, which is equivalent to 15 times the trunk diameter at 1.4m, where activities and development are managed to prevent damage to a scheduled tree. The maximum extent of a tree protection zone radius is restricted to 15m.
- 8.1.5 This is considered an appropriate approach to establishing a protective buffer zone around scheduled trees on private land which have been identified as a QM, within which development and activities will be managed to prevent any loss or damage to the relevant individual tree or group of trees.

- 8.1.6 Any development enabled within this protection zone is likely to have negative effects on the QM tree, as well as leading to potential risk to people and properties, as development and trees will be competing for space. As the tree grows, this matter will be more prominent, and is likely to lead to the eventual loss of the tree. Therefore, the option of enabling development of any height or density for residential purposes is not considered appropriate.
- 8.1.7 The proposed approach of identifying a protective radius and restricting development in that specific area is the most appropriate option for achieving the greatest heights and densities for the sites where QM trees are present. This is because outside of that radius, development will still be able to be undertaken to a level as permitted by the relevant zone standards. As a result, the proposed approach only restricts development within the relevant site to a specific area, allowing a suitable level of development to occur without compromising the identified qualifying matter present.
- 8.1.8 As set out in the Part 2 – Qualifying Matters s 32 report (sections 6.7¹⁰ and 6.25¹¹) trees are susceptible to damage and loss as result of conflicting development being enabled in close proximity to them. The benefits of trees are set out in the Part 2 – Qualifying Matters s 32 report.
- 8.1.9 The social, cultural and ecological services that other QM scheduled trees provide for Christchurch contribute to well-functioning urban environments, which the NPS-UD seeks to achieve through Objective 1 and Policy 1. The retention of trees also supports the resilience of neighbourhoods to the future effects of climate change, and the supported reduction in greenhouse gas emission through carbon sequestration, in line with NPS-UD objective 8.
- 8.1.10 The significant level of development which is enabled as permitted through the MDRS is likely to result in a contest of space between scheduled trees and built form. This could include overshadowing, crowding, and loss of the schedule trees. Retention of scheduled trees is important due to the environmental, social, and cultural services and values that trees provide to Christchurch. Therefore, development around QM scheduled trees needs to be of a suitable scale and density to not lead to the loss and damage of those trees. The MDRS level of development is not considered compatible to address this.

¹⁰ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

¹¹ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-3-15-March.pdf>

- 8.1.11 The identification of scheduled trees as QM still allows for medium and high-density urban development to be undertaken outside of the protective radius of the trees, and is considered to be a fairly small scale restriction on the enabled density of urban development. However, the benefits of protecting scheduled trees will ensure the urban environments created through enabling intensification are still well-functioning, and more resilient to the effects of climate change. Therefore, this approach is assessed to be giving effect to the relevant objective and policy direction of the NPS-UD.
- 8.1.12 The Significant Trees Qualifying Matters Technical Report attached as Appendix 24¹² to the Part 2 – Qualifying Matters s 32 report includes justification of the QM trees (including trees meeting the Christchurch Tree Evaluation Method (**CTEM**) thresholds). The scheduled trees which have been proposed as other QMs have been assessed by qualified arborists and landscape architects, using a CTEM assessment to recognize the substantial benefits which these trees provide. For trees with heritage value, a qualifying matter applies because the protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance under S(6)(f). Appendices 25 – 28¹³ to the Part 2 – Qualifying Matters s 32 report includes the full assessment of each tree. A number of existing scheduled trees in Appendix 9.4.7.1 are not proposed as QM trees.
- 8.1.13 The costs and benefits of the heritage trees and non-heritage trees QM are set out in section 6.25.12 of the Part 2 – Qualifying Matters s 32 report. In summary, retaining the Appendix and provisions for QM trees is considered the most appropriate in achieving the objectives and higher order documents. The proposed approach is effective in that it achieves the relevant provisions of the RMA and higher order documents. I have reviewed the s 32 report and agree with the costs and benefits identified, having regard to the efficiency and effectiveness of the provisions, except where I have recommended amendments below.

¹² Appendix 24 - <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/QM-Trees-Technical-Report- Jun2022-FINAL.PDF>

¹³ Appendix 25 - <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/FINAL-Full-Trees-Assessment-Schedule-23-June-222.pdf>

Appendix 26 - https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/QM-Trees-Attachment-B1_Significant-Individual-Trees-T0-500s_June2022.PDF

Appendix 27 - https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/QM-Trees-Attachment-B2_Significant-Individual-Trees-T600-T1100s_June2022.PDF

Appendix 28 - https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32-Appendices-1/QM-Trees-Attachment-C_Significant-Tree-Groups_QM-July2022.PDF

8.2 IMPACT ON DEVELOPMENT CAPACITY

8.2.1 The Significant and Other Trees QM proposes to control development within the spatial extent of the QM, including partial areas of a site, potentially limiting medium density capacity and/or increasing process costs. An assessment of the impact of QMs on development capacity enablement under MDRS has been undertaken in the evidence of Mr John Scallan. The assessed Plan enabled potential impact on development capacity for the Significant and Other Trees QM is 1670 units. The assessed feasible potential impact (either full or part site yield) on development capacity is 232 units. This assessment does not indicate lost capacity, rather it indicates the capacity that may be impacted by this QM.

8.3 TECHNICAL EVIDENCE

8.3.1 This report is intended to be read in conjunction with the following expert evidence which I have used or relied upon in support of the opinions expressed in this report:

- Toby Chapman (City Arborist - CCC) – Arboricultural evidence
- Andrew Benson (The Tree Consultancy Company) – Tree protection zones and setbacks
- Hilary Riordan (Resource and Landscape Planner - CCC) – Landscape evidence for the Significant and Other Trees QM
- John Scallan (Senior Planner Urban Regeneration - CCC) – Housing capacity assessment

8.4 SIGNIFICANT AND OTHER TREES QM - ANALYSIS OF SUBMISSIONS AND FURTHER SUBMISSIONS

8.4.1 A complete list and brief summary of all the submissions on the Significant and Other Trees QM, along with my overall recommendation on each submission, is attached as Appendix A.

Issue 1 – Less controls under QM

8.4.2 In submission **S405**, **Blake Quartly** comments trees should be the responsibility of the Council and used in public space. He goes on to comment that many great cities around the world prefer street trees to residential trees and they are more likely to be maintained and are for all to enjoy.

- 8.4.3 I note the proposed QM is based on the current Plan and includes only trees assessed to be expertly justified as worthy of retention. The removal of this qualifying matter/protecting only street trees would not sit well with existing *Objective 9.4.2.1.1* which seeks to maintain and enhance the contribution of the Christchurch District's significant trees listed in Appendix 9.4.7.1, and trees in road corridors, parks, reserves and public open space, to community amenity.
- 8.4.4 The Part 2 - Qualifying Matters s 32 report (sections 6.7¹⁴ and 6.25¹⁵) assesses the costs and benefits of the proposed QM and concludes that the proposal is the most appropriate way to achieve the objectives of the District Plan and higher order direction and I agree with this assessment. In his evidence, Mr Chapman discusses that as the trees in the Schedule are mature, they reflect an asset that cannot be replaced within a reasonable timeframe. He considers it is also likely that post development, the availability of space required to support large mature trees will diminish. I accept this advice. I consider that if this QM were removed the costs would outweigh the benefits, and the adverse effects of intensified development on QM trees would not be appropriately managed.
- 8.4.5 The **Carter Group Limited** submission **S814.14, S823.34, S814.38, S814.111 - 814.114**, seeks that the definition of tree protection zone radius is deleted and the definition of dripline is retained. They also seek the deletion of the qualifying matter provisions *9.4.1(c), 9.4.3(a) and (f), and 9.4.4*. They comment that the definition of dripline is preferred on the basis that it is more readily understood and the tree protection zone radius definition is complex and is open to conflicting interpretation. In addition, they oppose the identification of selected scheduled trees as qualifying matters given that the operative provisions relating to scheduled trees provide sufficient protection for such trees (including development buffers) and the presence of trees need not preclude more intensive forms of development.
- 8.4.6 Turning firstly to their concerns with the tree protection zone radius definition, Mr Benson's evidence outlines the tree protection zone radius is the area around a tree within which there are sufficient volumes of roots and soil to sustain healthy tree function. It is recognised by the

¹⁴ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

¹⁵ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-3-15-March.pdf>

International Society of Arboriculture and standard-setting institutions around the world for the protection of trees on construction sites. It is proposed that the tree protection zone radius is established by multiplying the trunk diameter of a tree (at 1.4m height) by 15. Mr Benson sets out that the dripline method often fails to capture a sufficient extent of a tree's root system to provide it with the necessary setback or protection zone during construction and his evidence then goes on to list the reasons for this, which in brief include, the pruning of trees altering the shape of the crown but not the root system, some trees are taller than they are wide and some trees grow asymmetrically resulting in insufficient protection of the root system. Mr Benson considers using the proposed tree protection zone radius optimises tree protection compared with other methods. I accept this advice. I consider this method would better achieve the outcomes sought in existing Objective 9.4.2.1.1 and Policy 9.4.2.2.3. The root protection zone radius provisions will ensure intensification adequately accommodates QM trees by providing separation tailored to each individual tree to a greater extent than the dripline which does not protect enough of the root system.

8.4.7 In my view the proposed tree protection zone radius would be more effective, and more straightforward to implement if it was amended to specify that the 1.4m height is measured above ground level. Another way to simplify the definition would be to refer to the definition of trunk diameter for single and multi-trunk trees that is included in the Australian Standard (AS4970:2009) (attached as Appendix A to Mr Benson's evidence). However, I am mindful users must pay to access the Standard, resulting in a cost to people wanting to understand and apply the rule. Furthermore, in most cases the nuance shown in the diagrams in the Standard are more conservative (allowing for a lesser setback due to a narrower measurement) and the diagrams are illustrative only and do not include all possible multi-trunk scenarios. Mr Benson suggests a new definition is necessary for multi-trunk trees, such as pōhutukawa, however I suggest the approach of outlining the 1.4m is to be measured from ground level would be more efficient.

8.4.8 An evaluation of the proposed changes to the tree protection zone radius was carried out in accordance with RMA s 32AA. The analysis, as shown in Table 3 below, concludes that the changes do not affect the s 32 evaluation conclusions and the proposed definition amended as a result of submissions is still the most appropriate way to achieve the objectives of the Plan.

Table 3 - s 32AA evaluation of recommended changes

Proposed amendments (in purple bold underline) to definition	Effects and evaluation of change
<p><u>Tree protection zone radius</u> <u>means the protection area around a scheduled tree, which is equivalent to 15 times the trunk diameter at 1.4m above ground level, where activities and development are managed to prevent damage to a scheduled tree. The maximum extent of a tree protection zone radius is restricted to 15m.</u></p>	<p>It is considered that there is no significant effect in terms of the s 32 evaluation.</p> <p>The change is minor in nature and provides greater clarity on how to measure single and multi-trunk trees at the height of 1.4m. This change is considered to be more efficient and effective than the notified version of the definition and is the most appropriate way to give effect to the objectives of the Plan.</p>

8.4.9 In addition, Mr Benson considers that, given the value of the QM trees (determined by Council’s section 32 assessment and supporting technical reports), and having regard to the Objectives and Policies of Subchapter 9.4, it is appropriate to ensure that a Technician arborist is involved in tree protection management decisions for QM trees.

8.4.10 Technician arborist is defined in the Plan as ‘in relation to Sub-chapter 9.4 Significant and other trees of Chapter 9 Natural and Cultural Heritage, means a person who:

- a. by possession of a recognised arboricultural degree or diploma and on the job experience, is familiar with the tasks, equipment and hazards involved in arboricultural operations; and
- b. has demonstrated proficiency in tree inspection and evaluating and treating hazardous trees; and
- c. has demonstrated competency to Level 6 NZQA Diploma in Arboriculture standard (or be of an equivalent arboricultural standard).

8.4.11 Plan Rule 9.4.4.1 P4 and P10, relating to felling of significant trees listed in Appendix 9.4.7.1, requires as an activity specific standard the requirement for certification by a technician arborist.

8.4.12 Mr Benson suggests that this requirement be included for restricted discretionary activities such as proposed Rules 9.4.4.1.3 RD5 (works within the tree protection zone radius of a significant tree, including QM trees) and RD6 (works within the tree protection zone radius of any tree in the Significant Trees area at Riccarton Bush). As mentioned above, Mr Chapman has suggested an activity specific standard for works within 5m of street trees requiring that activities shall be follow a site-specific Tree Management Plan¹⁶ produced by a technician arborist. I consider this could be

¹⁶ <https://ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/CSS/Download-the-CSS-2022/CSS-2022-PART-1-GENERAL.PDF>

an option to include as a matter of discretion under RD5 and RD6 for QM trees. For clarity this would not apply to street trees for the reasons set out further below. I have considered in Table 4 below whether there is any additional value added in including a requirement for a Tree Protection Plan in RD5 and RD6. Taking into account this assessment, in my view the existing assessment matters noted below appear sufficient and introducing this requirement would likely result in unnecessary overlap, which would be less efficient and may result in additional costs to applicants. I consider specific mitigation, required on a case-by-case basis, would be adequately addressed via conditions of consent.

Table 4 – Consideration of including a Tree Management Plan (TMP) requirement

TMP requirement	Comment
All relevant District Plan requirements and resource consent conditions.	Plan requirements and conditions of consent are addressed within a resource consent application. This would not add value to a resource consent assessment.
A brief tree/vegetation assessment; including the species, size (height, canopy spread and trunk diameter), the condition of the trees/vegetation, any existing damage or decline with photographic evidence, and identification numbers where known/applicable.	While not explicit, I consider this would be needed in any case to address assessment matters 9.4.6 a, b and d.
A description of the proposed activities, the potential direct and indirect effects on all affected trees/vegetation, recommendations and the mitigation measures to be implemented for the duration of the works.	A description of the proposed activity is a requirement of a resource consent application under Schedule 4 of the Act. I consider assessment matters 9.4.6 a – o, and associated consent conditions would sufficiently address this.
A site plan that clearly shows the precise location of the subject trees/vegetation, Tree Protection Zones, where temporary protective fencing and ground protection is to be installed, and the locations of any relevant works activities, access and storage areas, and temporary buildings, structures, tanks and	A site plan (description of the site) is a requirement of a resource consent application under Schedule 4 of the Act. I consider this level of detail would be needed in any case to address assessment matters 9.4.6 a – o and key mitigation measures would be included as consent conditions.

toilets. The site plan shall also include the precise location of any trees/vegetation to be removed and any replacement tree/vegetation planting.	
Where a tree/vegetation is proposed to be pruned, a description of the pruning and reasons. All relevant consents and tree owner/asset manager approvals will be required prior to the tree/vegetation being pruned. Where Council owned trees require pruning, this work is to be carried out by Council's tree maintenance contractor.	A description of the proposed activity is a requirement of a resource consent application under Schedule 4 of the Act. I consider assessment matters 9.4. a – o would sufficiently address this. The last sentence would not apply to non-Council properties and I do not consider it would add particular value to a resource consent assessment.
Where a tree/vegetation is proposed to be removed, a detailed assessment of the condition of the tree/vegetation and reasons for the tree removal. All relevant consents and approvals will be required prior to the tree/vegetation being removed. Replacement tree/vegetation planting and establishment will be required as defined by the Engineer and as specified in CSS Part 7 –Landscapes	I consider assessment matters 9.6.4 a – o would sufficiently address this. In addition, where activities require resource consent the consent must be granted before works commence. Provision of a replacement tree is a consideration under assessment matter 9.4.6 h.
The name/s, contact details and qualifications of the technician arborist and the supervising arborist/s.	I consider assessment matter 9.4.6 c and any associated conditions would sufficiently address this.

8.4.13 With respect to including a requirement for involvement of a Technician arborist under RD5 and RD6, as set out above, I have recommended changes to the tree protection zone radius definition to ensure this method is sufficiently clear and measurable. It would not appear necessary that a Technician arborist would be required in all cases to measure the tree protection zone radius. However, I consider that assessment by a Technician arborist could be valuable in some cases for QM trees where Rule 9.4.4.3.1 RD5 or RD6 applies. I consider a new assessment matter should be included into the assessment matters in Rule 9.4.6 under existing point 'c'. In my view this requirement to involve a Technician Arborist is appropriate given that it will only apply where it is necessary due to the scale or nature of the works.

8.4.14 An evaluation of the proposed changes to the assessment matters in Rule 9.4.6 was carried out in accordance with RMA s 32AA. The analysis, as shown in Table 5 below, concludes that the changes

do not affect the s 32 evaluation conclusions and the proposed definition amended as a result of submissions is still the most appropriate way to achieve the objectives of the Plan.

Table 5 - s 32AA evaluation of recommended changes

Proposed amendments (in purple bold underline) to Rule 9.4.6	Effects and evaluation of change
<p><u>c. Whether the works will be undertaken in a manner consistent with internationally accepted arboricultural standards, practices and procedures, and relating to qualifying matter trees, whether the scale or nature of the works warrants the involvement of a Technician arborist;</u></p>	<p>It is considered that there is no significant effect in terms of the s 32 evaluation.</p> <p>The change is minor in nature and provides greater protection of QM trees by including an assessment matter that specifically provides for the involvement of a Technician Arborist where it is warranted due to the scale or nature of the works. I consider this change to balance the costs and benefits and it ensures that this specialist input is only sought when necessary. This change is considered to be more efficient and effective than the notified version of the assessment matters and is the most appropriate way to give effect to the objectives of the Plan.</p>

8.4.15 Turning to the request to remove Significant and Other Trees as a QM, as set out in the Part 2 Qualifying Matters s 32 report, the safeguarding of scheduled trees ensures the positive environmental, social and cultural services they provide are retained for current and future generations. The environmental, social and cultural benefits that scheduled trees provide for Christchurch currently, and are anticipated to provide in the future, are important to retain by suitably protecting scheduled trees on private land from the likely effects arising from enabled permitted intensification of development. The evidence of Mr Chapman and Ms Riordan further sets out the benefits of protecting trees, as is proposed in this QM, which I accept. As set out in the Part 2 – Qualifying Matters s 32, the proposed tree protection zone radius is considered the most appropriate way to achieve the objectives in the Plan and higher order documents.

8.4.16 **The Catholic Diocese of Christchurch in S823.34** also seek that the definition of tree protection zone radius is deleted and the definition of dripline is retained. They comment that the definition of dripline is preferred on the basis that it is more readily understood and the tree protection zone radius definition is complex and is open to conflicting interpretation. The response to the above Carter Group Limited submissions is equally applicable here.

8.4.17 The **Kāinga Ora – Homes and Communities** submission **S834.26** and the **Otautahi Community Housing Trust** in **S877.8** seek that existing *Rule 9.4.4.1.1 P12* be updated to remove the activity

specific standard requiring a works arborist be employed or contracted by the Council or a network utility operator. They seek the following amendment: Rule 9.4.4.1.1 P12 a. Activities shall be undertaken by, or under the supervision of, a works arborist ~~employed or contracted by the Council or a network utility operator.~~

- 8.4.18 Under *Rule 9.4.4.1.1 P12*, earthworks within 5m of the base of a tree in parks, public open space or road corridors which meets the criteria of the rule is permitted if the works are undertaken by or under the supervision of a works arborist employed or contracted by the Council or a network utility operator, amongst other criteria. If the tree is taller than 6 m, or if the activity is not overseen by a works arborist, then the earthworks within 5 m of the street tree is a Restricted Discretionary Activity under 9.4.4.1.3 (RD8) Both submitters consider that the relief sought would reduce costs and the reliance on the resource consent process and therefore would be more consistent with Objective 3.3.2.
- 8.4.19 Mr Chapman's evidence outlines that this requirement for the works arborist to be employed or contracted by the Council or a network utility operator provides Council with assurance that the works will not be conducted in a manner that would create unnecessary harm to the tree. He comments that as part of Council's approval process for arborists to monitor works around trees, they must undertake additional training on this type of work. Furthermore, any project on Council land requires, under Council's Tree Policy and Construction Standard Specification (**CSS**), a Tree Protection Management Plan be submitted to Council for approval which must be produced by a technician arborist, being a higher qualified individual with specific training in assessing and managing construction around trees. He notes this is required when development requires any works on Council land such as the construction of a new driveway.
- 8.4.20 He acknowledges that the current rule of any works within 5m of the base of the tree can lead to additional costs and delays to the developer in the form of a resource consent application when working within their property boundary (an area not covered by the Tree Policy or CSS), and that a 5m setback is in many instances either too large or too small depending on the size of the tree that is being protected. Mr Chapman recommends the 5m requirement be amended to the tree protection zone radius, which has been defined under PC14 in Chapter 2 of the Plan. He also suggests activity specific standard a. be altered to '*Activities shall follow a site-specific Tree Protection Management Plan produced by a technician arborist*'. He considers that these changes will ensure that the tree is assessed by a person who has the correct level of training and recommend the correct controls for the situation. He also notes as this condition would make the

works permitted no resource consent would be required and there would be no requirement for the technician arborist to be employed or contracted by CCC. Finally, he suggests that Council could provide guidelines on how to determine the tree protection zone radius to allow the project owner to determine whether or not a Tree Protection Management Plan is required.

8.4.21 Similarly, Mr Benson considers that street trees should be protected from development by using the trunk diameter tree protection zone radius method, instead of the 5m setback approach, and there should be a minimum setback of 3m from all street trees for the reasons set out in his evidence.

8.4.22 I note Exemption 8.9.3a iv, allows for any earthworks subject to an approved building consent within the footprint of the building, which extends 1.8m out from the wall. With a 1.5m front yard setback, meaning earthworks could conceivably extend to within the 5m around a street tree and it does not take into account the proposed tree protection zone radius. Such works would be permitted with no activity standards applying.

8.4.23 I am mindful that street trees have not been proposed as a QM in PC14 as notified. Including street trees as a QM and setting a requirement to use the tree protection zone radius method as well as a 3m minimum setback for earthworks would have potentially significant implications on the development capacity enabled by MRDS and Policy 3. It would be an 'other matter' under s77I and s77J of the Act, requiring a significant level of detailed assessment. Including a street trees QM would likely require a variation to PC14 and a full assessment, which has not been undertaken, would be required. While the above submission points from Kainga Ora and the Otautahi Community Housing Trust specifically comment on street tree provisions in *Rule 9.4.4.1.1 P12*, the request does not extend to consideration of a new street trees QM. Similarly, while there is a submission (S654), outlined further below, which seeks to strengthen the requirements for trees, I consider this request is very broad. In my view introducing a new QM would introduce a significant change to PC14, and is unlikely to have been reasonably anticipated. I therefore do not recommend progressing a street tree QM given this appears to be out of scope of PC14.

8.4.24 I consider the operative version of activity specific standard 'a' under *Rule 9.4.4.1.1 P12* should remain, being: Activities shall be undertaken by, or under the supervision of, a works arborist employed or contracted by the Council or a network utility operator.

Recommendation

8.4.25 In my view, submission **S405** from **Blake Quartly** be rejected for the reasons set out above.

8.4.26 Turning to the **Carter Group Limited** submission **S814.14, S823.34, S814.38, S814.111 - 814.114**, for the reasons outlined above I consider this submission should be rejected. In my view the definition of tree protection zone radius can be improved to more clearly set out the acceptable method of measuring the tree diameter breast height. In addition, I consider the involvement of a Technician Arborist for resource consent applications is warranted in some cases and therefore an assessment matter should be included to reflect this. I therefore recommend the definition of tree protection zone radius be updated and that the assessment matters in Rule 9.4.6 be updated (in purple) as follows:

Tree protection zone radius

means the protection area around a scheduled tree, which is equivalent to 15 times the trunk diameter at 1.4m **above ground level**, where activities and development are managed to prevent damage to a scheduled tree. The maximum extent of a tree protection zone radius is restricted to 15m.

9.4.6 – Matters of discretion

c. Whether the works will be undertaken in a manner consistent with internationally accepted arboricultural standards, practices and procedures, **and relating to qualifying matter trees, whether the scale or nature of the works warrants the involvement of a Technician arborist;**

8.4.27 For the reasons set out above in my view the **Catholic Diocese of Christchurch** submission **S823.34** should be rejected.

8.4.28 Lastly, I consider that the **Kāinga Ora – Homes and Communities** submission **S834.26** and the **Otautahi Community Housing Trust** in **S877.8** should be rejected for the reasons outlined above.

Issue 2 – More controls under QM

8.4.29 In her submission **S654.2, S654.3 Wendy Fergusson** requests that PC14 strengthen the requirements for trees. I note the submitter did not include any specific suggestions on measures to further protect trees through the plan change. Similarly, the **Lower Cashmere Residents Association** submission **S741.1, S741.2** comments that areas of bare land have been cleared of anything growing to the cost of mature trees and this should not be allowed. The submitter notes that each unit built includes a new tree however this does not replace the positive effects that

mature trees offer. Furthermore, **Greg Partridge's** submission **S794.6** seeks further protection of the city's tree canopy and suggests an immediate amendment to the Enabling Housing Supply and Other Matters Act. This suggestion is covered under the Tree Canopy s 42A Report prepared by Anita Hansbury, however I will comment on the broad request for protecting of tree canopy cover as applicable to this QM. The **Summit Road Society** submission **900.4** supports this QM and seeks that the Financial Contribution requirements incentivise keeping existing mature trees. This suggestion is covered under the Tree Canopy s 42A Report, however I will comment on incentivising keeping mature trees as relevant to this QM.

8.4.30 In my view the proposed Significant and Other Trees QM will contribute to protecting trees in light of intensification enabled under MDRS and Policy 3. The QM is aligned with the requirements of the Act as the Significant and other Trees in Appendices 9.4.7.1 that meet s6(f) in terms of the heritage criteria have been assessed under s77J, and s77P and the non-heritage Significant and other Trees in Appendices 9.4.7.1 have been assessed under s77J, s77L, s77P, and s77R. Furthermore, the QM proposes the tree protection zone radius to strengthen protection of Significant and Other Trees. As outlined above, I am recommending that the definition is strengthened to ensure it is a method that is easy to understand and implement.

Recommendation

8.4.31 In my view, the following submissions should be rejected for the reasons set out above: **Wendy Fergusson** submission **S654.2, S654.3**, **Lower Cashmere Residents Association** submission **S741.1, S741.2**, **Greg Partridge's** submission **S794.6**, and **Summit Road Society** submission **900.4**

Issue 3 – Site and area specific changes to QM

8.4.32 The notified version of PC14 proposes that *Rule 9.4.4.1.3 RD6* be amended as follows:

RD6	<p>a. Any of the following within 10 metres tree protection zone radius of the base of any tree in the Significant Trees area at Riccarton Bush:</p> <ul style="list-style-type: none"> i. works (including earthworks, other than as provided for by Rule 9.4.4.1.1 P12); ii. vehicular traffic; iii. sealing or paving (excluding earthworks); iv. storage of materials, vehicles, plant or equipment; or v. the release, injection or placement of chemicals or toxic substances. <p>b. In the case of the property at 48 Rata Street (legally described as Lot 375 DP 11261) the 10 metre</p>	a. Rule 9.4.6 a. – o.
	<p>restriction shall only apply to the northern boundary of that property.</p> <ul style="list-style-type: none"> c. For the purposes of this rule, the outer boundary defining the Significant Trees Area (which follows the predator-proof fence surrounding the forest remnant) shall be deemed to be the base of the tree. d. Any application arising from this rule shall not be limited or publicly notified. 	

8.4.33 The **Riccarton Bush Trust** submission **S44.7** seeks regarding *Rule 9.4.4.1.3 RD6* to remove the proposed tree protection zone radius and maintain the existing Plan 10m setback control taken from the predator-proof fence. Similarly, **John Hardie** on Behalf of Trustee of family trust in submission **S1011.1** opposes all restrictions on the boundary of its property at 48 Rata Street (refer to ‘b’ in RD6 above).

8.4.34 The Riccarton Bush Trust submission includes the following commentary from Council city planning staff: ‘the phrasing proposed for RD6 appears to have been an oversight, for the simple reason that there is no ability to measure tree trunk when the rule specifies that the trunk is the predator-proof fence. The original rule deliberately used the predator-proof fence as the base for measurement to make the measurement easier and uniform, and apply to mature trees as well as saplings that, without disturbance or damage will eventually grow... Another reason for using the predator-proof fence as a “base of a tree” within the old City Plan rules was that Riccarton Bush is treated as one entity, rather than a collection of individual trees within, and is shown as such on the maps. In this respect, a more appropriate control may simply be retaining the current controls due to the unique circumstances under which the Bush is protected in the Plan. In this respect, a more appropriate control may simply be retaining the current controls due to the unique circumstances under which the Bush is protected in the Plan.’

- 8.4.35 The Riccarton Bush Trust also comment that the 10m buffer was decided on in PC44 and was agreed to by neighbours in that process and is considered superior as it protects all the trees within the area including saplings and other smaller or thinner trees. John Hardie outlines that Riccarton Bush abuts two sides of 48 Rata Street and they oppose the removal of the 10m setback control. He considers the proposed provision is unworkable and would require all trees in the bush to be measured on a continuing basis because of a change in trunk diameter. They also discuss the history of the 10m setback relating to PC44.
- 8.4.36 Mr Benson discusses these submissions in his evidence. In summary, he considers the proposed replacement of the current 10 m setback from the predator-proof fence at Riccarton Bush with the new tree protection zone radius method in Rule 9.4.4.1.3 RD6 is appropriate and necessary because a 10m setback may be insufficient to afford adequate protection from development to larger trees around the perimeter of Riccarton Bush. He considers if a blanket approach is preferred for brevity and ease of use, then he recommends the setback be at least 15m, which is the maximum tree protection zone radius within the current best practice documents and the notified version of PC14.
- 8.4.37 Ms Riordan considers, regarding Rule 9.4.4.1.3 RD6, that the tree protection zone radius should be implemented without the consideration of the predator fence, given that it provides a methodical approach that can be applied with reasonable efficiency while providing protection of these trees and their roots. She considers it would enable more refined design responses to occur, rather than a more delineated singular setback from a ridged fence line.
- 8.4.38 I have turned my mind to the proposed Riccarton Bush QM, which is set out in detail in the Residential s 42A report prepared by Ike Kleynbos. This QM would limit the number of units per site to two, set a site density of 450m², set a maximum site coverage of 35%, set a 4.5m road setback and 3m side setback, and a lowered building height. Should the Panel accept the Riccarton Bush QM, my recommendation would be to retain the 10m setback from the predator fence given that the level of effects would not increase.
- 8.4.39 I am also mindful that should the Panel accept the extended Airport Nosie Contour (ANC), this would include properties adjoining Riccarton Bush which would have the effect of maintaining the operative zoning and associated density (currently Residential Suburban and one small section of Residential Medium Density). Should the Panel accept the case of the ANC being extended, my recommendation would be to retain the 10m setback from the predator fence given that the level of effects would not increase.

- 8.4.40 Should the Panel be minded to recommend not accepting the extended ANC or the Riccarton Bush QM, with intensification enabled to a greater extent than provided for under these two QMs, then I recommend the tree protection zone radius be adopted, and the requirement to measure the setback from the predator proof fence be removed. In my view, taking into account the expert advice received above, this would best achieve the intent of *Objective 9.4.2.1.1* and associated policies.
- 8.4.41 The **Ceres New Zealand** submission **S150.25, S150.26** seek to remove the Horizontal Elm (*Ulmus glabra Horizontalis*) tree located on 25 Peterborough Street (Significant Tree #274) from Appendix 9.4.7.1, and to remove the Significant and other Trees overlay applied to 25 Peterborough Street and update Planning Map 32C and H10 accordingly. They comment that location of the Horizontal Elm, which is behind the existing building, will highly likely restrict or impede the reconstruction/redevelopment of the earthquake damaged heritage building at the site by limiting layout and design options. However, resultant of removing the Horizontal Elm, more options may be available for the reuse of the property and building including the area located at the centre. Mr Chapman has reviewed this submission and outlines in his evidence that an assessment was not able to be undertaken on T274 due to time constraints and difficulties in accessing the site. He outlines that aerial imagery taken in December 2021 show the tree has a full canopy and does not indicate any signs that the tree is dead or in severe decline. The submission does not draw any attention to the tree's condition. He comments that there are many examples of sites with existing trees that have been able to be restored or developed without requiring the loss of the tree, such as the Christchurch Cathedral and the mature plane trees within the site. He considers that there is no clear evidence that the site could not be restored or developed without the tree being removed. I accept this advice. I note PC14 is not the appropriate process to consider the removal of non-QM trees from the schedule in Appendix 9.4.7.1 and would require a separate plan change.
- 8.4.42 In submission **S499.1, S499.2 Daniel Rutherford** seeks the removal of the Significant and Other Trees Qualifying Matter and seeks to remove the Tasmanian blue gum at 20 Macmillan Ave from Appendix 9.4.7.1. The submitter is concerned with safety, cost and upkeep of T903 at 20 Macmillan Avenue. This tree is proposed to be a Heritage QM Tree.
- 8.4.43 Mr Chapman in his evidence sets out that trees that have been identified as being over 100 years old have been included as a qualifying matter as per s771(a) RMA Section 6 Heritage Matter. He outlines that Christchurch City has a relatively young population of trees accredited to it being in an area that was not historically covered in large trees (with the exception of Riccarton Bush and

Papanui Forest). Therefore, trees that are over 100 years old are the oldest trees within the city and they provide links back to the early development of the city, in particular that of the early European settlement. He raises concern that as trees reach maturity they become less resilient to change and are more susceptible to being adversely impacted by development, and without adequate rules in place to manage works within the vicinity of these older trees, they will be at risk of being lost unintentionally. I accept this advice. Given that heritage trees are a s6 heritage matter I consider that the costs would outweigh the benefits in removing the proposed protection for T903 as a QM tree.

8.4.44 **Foodstuffs** in submission **S705.2** seek to exclude the protected tree T1118 on Stanmore Road frontage at 300 and 304 Stanmore Road and 9 and 11 Warwick Street. Foodstuffs consider removal better represents the existing environment. Ms Riordan, in her evidence, has reviewed this submission and outlines this tree was assessed by the Arborist to be over 100 years old and has been proposed as a Heritage Tree QM in the schedule. She considers that the removal of this tree would cause the loss of a visible landscape feature that has existed for 100 years or more. She does not consider the removal of this heritage tree to better represent the existing environment given that it is a notable marker within the landscape, it helps to draw the green space from the park across Stanmore Road to landscape and streetscape which is otherwise very void of trees, and it aids in softening the urban form, reducing the scale of the building, and the hard landscaping that dominates east of Stanmore Road and the site at 300 Stanmore Road. Mr Chapman comments that T1118 has a plaque outlining it was planted in 1865, making the tree 158 years old. In addition, he comments that the tree is listed on the New Zealand Tree Register as being a Notable tree of national interest. He considers that this tree should be protected as a QM tree given its age and historical significance. I accept this advice. Given that heritage trees are a s6 heritage matter I consider that the costs would outweigh the benefits in removing the proposed protection for T1118 as a QM tree.

8.4.45 The **Carter Group Limited** in submission **S814.115** seek to delete the scheduling of the common lime and variegated sycamore trees at 32 Armagh Street comprising T12 (QM tree in notified version of PC14), and T13 (Non-QM tree in notified version of PC14). The submitter does not agree that the trees are of such significance as to warrant their listing and protection, particularly given that their retention significantly constrain the development capacity of the site. In the submitter's view, these significant costs outweigh any benefits of scheduling.

8.4.46 Mr Chapman has reviewed this submission and comments in his evidence that T12 was assessed using CTEM on the 12th of April 2022, however T13 was not assessed due to time constraints. T13 has since been assessed by Mr Chapman on the 20th of July 2023 using CTEM which revealed the tree also met the threshold to be protected as a QM. He considers that both trees are worthy of protection and furthermore considers the placement of the trees within the site does not exclude development given that both trees are near the boundary of the section. He outlines that a tailored approach is required to development of the site with additional guidance and input from a qualified and experienced arborist. Ms Riordan considers creating a design that harmonizes with the presence of these trees can lead to an improved landscape outcome for Christchurch, offering a distinct sense of place while safeguarding these scheduled significant trees. With respect to T12 and T13 specifically, she considers their preservation would contribute positively to the overall aesthetics and add to the identity of Christchurch. I accept this advice and consider that the proposed protection afforded by the QM will balance the costs and benefits, requiring resource consent where necessary to ensure adequate consideration of the tree.

8.4.47 The **Daresbury Ltd** submission **S874.31** opposes the identification of selected scheduled trees as QMs and consider the operative provisions relating to scheduled trees (including development buffers) and the presence of trees need not preclude more intensive forms of development. They comment that Daresbury Limited owns land located within Fendalton Road, Daresbury Lane, and Harakeke Street and the site contains a number of listed individual significant trees in the District Plan. They note it is not clear why for a tree to be a QM tree it must be assessed as over 100 years in age. They consider the QM provisions are not efficient or effective and the operative provisions managing development in the vicinity of listed trees are considered appropriate, effective and efficient. They oppose the QM trees proposed at the site and outline the s 32 assessment does not justify the inclusion for this site. The evidence of Mr Chapman relating to the Carter Group Limited submission S814.115 above equally applies to this submission. I accept this advice.

Recommendation

8.4.48 In my view, submission **S44.7** from the **Riccarton Bush Trust** should be accepted in part. Should the Panel recommend the extended ANC and Riccarton Bush QMs prevail then I recommend the 10m setback from the predator fence be retained and the requirement to apply the tree protection zone radius be removed. Should the Panel recommend the QMs be removed, allowing for intensification adjoining Riccarton Bush, I recommend the tree protection zone radius apply, and the requirement for the setback to apply from the predator proof fence be removed.

8.4.49 I propose the following recommended change to 9.4.4.1.3 RD6 should the Riccarton Bush QM and the expanded Air Noise Control QM not be retained (referred to in purple):

9.4.4.1.3 Restricted discretionary activities

Activity		The Council’s discretion shall be limited to the following matters:
RD6	<p>a. Any of the following within 10 metres tree protection zone radius of the base of any tree in the Significant Trees area at Riccarton Bush:</p> <ul style="list-style-type: none"> i. works (including earthworks, other than as provided for by Rule 9.4.4.1.1 P12); ii. vehicular traffic; iii. sealing or paving (excluding earthworks); iv. storage of materials, vehicles, plant or equipment; <p>or</p> <ul style="list-style-type: none"> v. the release, injection or placement of chemicals or toxic substances. <p>b. In the case of the property at 48 Rata Street (legally described as Lot 375 DP 11261) the 10 metre restriction shall only apply to the northern boundary of that property.</p> <p>c. For the purposes of this rule, the outer boundary defining the Significant Trees Area (which follows the predator-proof fence surrounding the forest remnant) shall be deemed to be the base of the tree.</p> <p>dc. Any application arising from this rule shall not be limited or publicly notified.</p>	Rule 9.4.6 a. – o.

8.4.50 I recommend the following change to 9.4.4.1.3 RD6 should the Riccarton Bush QM and the expanded Air Noise Control QM be retained (i.e. retain the operative version of RD6):

9.4.4.1.3 Restricted discretionary activities

Activity		The Council's discretion shall be limited to the following matters:
RD6	<p>a. Any of the following within 10 metres—tree protection zone radius of the base of any tree in the Significant Trees area at Riccarton Bush:</p> <ul style="list-style-type: none"> i. works (including earthworks, other than as provided for by Rule 9.4.4.1.1 P12); ii. vehicular traffic; iii. sealing or paving (excluding earthworks); iv. storage of materials, vehicles, plant or equipment; <p>or</p> <ul style="list-style-type: none"> v. the release, injection or placement of chemicals or toxic substances. <p>b. In the case of the property at 48 Rata Street (legally described as Lot 375 DP 11261) the 10 metre restriction shall only apply to the northern boundary of that property.</p> <p>c. For the purposes of this rule, the outer boundary defining the Significant Trees Area (which follows the predator-proof fence surrounding the forest remnant) shall be deemed to be the base of the tree.</p> <p>dc. Any application arising from this rule shall not be limited or publicly notified.</p>	a. Rule 9.4.6 a. – o.

8.4.51 Furthermore, for the reasons set out above I consider the following site-specific submissions should be rejected: S150.25 and S150.26 from Ceres New Zealand, S499.1 and S499.2 from Daniel John Rutherford, S705.2 from Foodstuffs, S814.115 from Carter Group Limited, S874.31 from Daresbury Ltd, and S1011.1 from John Hardie On Behalf Of Trustee of family trust. With respect

to the above mentioned Carter Group submission, I recommend T13 is included as a QM tree within the schedule in Appendix 9.4.7.1.

Appendix 9.4.7.1 Schedules of significant trees (Christchurch City and Banks Peninsula)

Street number	Street address	Tree ID	Planning Map Number	GPS Easting Co-ordinate	GPS Northing Co-ordinate	Name		Exceptional Values	Qualifying Matter
32	Armagh Street	T13	32C, H15	2480089.143	5741995.833	Acer pseudoplatanus	Variegated Sycamore		No -Yes = <u>Section 7</u>

9 PLAN CHANGE 14 – NATURAL HAZARDS QMS

9.1 OVERVIEW

9.1.1 The HFHMA, FPMA and Slope Instability QMs are all section 6(h) matters (which requires that decision-makers must recognise and provide for the management of significant risks from natural hazards as a matter of national importance) and come within sub-section 77I(a) of the Act. This includes the management of significant risks from natural hazards. The relevant higher order documents are set out in Section 5 of this report.

9.1.2 PC14 proposed Strategic Objective 3.3.7 Well-functioning urban environment is applicable noting it requires a well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

9.1.3 I consider that Strategic Objective 3.3.6 Natural hazards, sets a clear direction to avoid development in areas at risk of natural hazards where the risk is assessed as unacceptable. This strategic objective sets the scene for the risk based approach to natural hazards in the Plan.

9.1.4 The relevant Policies in Chapter 5, which are set out Section 5 above, include requirements to map natural hazard risk. *Policy 5.2.2.2.1.b* requires that, in relation to new development in the HFHMA (where i and ii do not apply) subdivision, use or development is avoided where it will increase the

potential risk to people's safety, well-being and property. Clauses d – f in this Policy relate to maintaining flood storage capacity and function, ensuing filling does not transfer flood risk, and requirement of floor levels to be above the predicted flood level including freeboard allowance. Clauses d - f apply to both the HFHMA and FPMA.

- 9.1.5 With respect to slope instability, *Policy 5.2.2.4.2* seeks to provide for site-specific assessment of risk from rockfall and/or cliff collapse, in Rockfall Management Area 1, Rockfall Management Area 2, and/or Cliff Collapse Management Area 2, in accordance with the method and parameters described in *Policy 5.2.2.4.1a5* (along with all relevant site-specific information) in order to allow for the issue of Annual Individual Fatality Risk (**AIFR**) certificates. The development of the Plan had regard to the higher order policy direction and in my view is consistent with it.
- 9.1.6 Fundamentally the approach to the proposed Natural Hazards QMs (as relevant to this report) is to carryover the current District Plan provisions as they relate to HFHMA, FPMA, the Cliff Collapse Management Area 1, Cliff Collapse Management Area 2 and Rockfall Management Area 1. The rules are discussed further above.
- 9.1.7 The intensification sought to be enabled through MDRS and Policy 3 of the NPS-UD is not consistent with the higher order direction on management of significant risks from natural hazards described in section 5 of this report. Without the Natural Hazards QMs enabling greater densities in areas at risk of natural hazards could result in more harm to people and property which could have been avoided. Therefore, the Natural Hazards QMs proposal is to carryover the existing HFHMA, FPMA and slope instability overlays and controls to ensure inappropriate development does not occur in these areas, putting more people and property at risk of harm. It is proposed to apply MDRS with a QM to limit development to one unit per site in the FPMA to protect the storage function, and to avoid increasing the extent of risk in both the FPMA and HFHMA.
- 9.1.8 The costs and benefits of the Natural Hazards QMs are set out in sections 6.8 and 6.9 of the Part 2 – Qualifying Matters s 32 report¹⁷. In summary, retaining the HFHMA, FPMA and slope instability provisions is considered the most appropriate in achieving the objectives and higher order documents. The proposed approach is effective in that it achieves the relevant provisions of the RMA and higher order documents.

¹⁷ <https://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/district-plan/Proposed-changes/2023/PC14/Section-32/Plan-Change-14-HBC-NOTIFICATION-Section-32-Qualifying-Matters-Part-2.pdf>

9.2 IMPACT ON DEVELOPMENT CAPACITY

9.2.1 The Natural Hazards QMs proposes to control development within the spatial extent of these QMs, including partial areas of a site, potentially limiting medium density capacity and/or increasing process costs. An assessment of the impact of QMs on development capacity enablement under MDRS has been undertaken in the evidence of Mr John Scallan. The assessed Plan enabled potential impact on development capacity for the HFHMA, FPMA and Slope Instability QMs is 7000, 8990, and 6210 units respectively. The assessed feasible potential impact (either full or part site yield) on development capacity for the HFHMA, FPMA and Slope Instability QMs is 1190, 744 and 1310 units respectively. This assessment does not indicate lost capacity, rather it indicates the capacity that may be impacted by this QM.

9.3 TECHNICAL EVIDENCE

9.3.1 This report is intended to be read in conjunction with the following expert evidence which I have used or relied upon in support of the opinions expressed in this report:

- Brian Norton (Senior Stormwater Planning Engineer - CCC) – Stormwater management evidence
- Jesse Dykstra (Principal Geotechnical Advisor - CCC) – Geotechnical evidence
- John Scallan (Senior Planner Urban Regeneration - CCC) – Housing capacity assessment

9.4 NATURAL HAZARDS QMS - ANALYSIS OF SUBMISSIONS AND FURTHER SUBMISSIONS

9.4.1 A complete list and summary of the submissions on the Natural Hazards QMs, along with my overall recommendation on each submission, is attached as Appendix A.

Issue 1 – Specific changes to proposed QM provisions

9.4.2 Submitter **Alex Hallatt** in **S290.2** seeks that all new builds are required to provide stormwater collection and storage (such as via tanks or natural rain systems). As set out in the evidence of Mr Norton, under Council's Stormwater and Land Drainage Bylaw 2022, connection to the stormwater network requires Council's written approval which includes the assessment of whether on site mitigation is required. All hill sites (>5 degrees slope) are required to install rain tanks or other suitable mitigation when new development or intensification takes place. Mitigation of flat urban areas is required where the additional impervious area added is greater than 150m² and the resultant impervious area covers more than 70% of the total site area. The need for approval to

connect to the stormwater network is identified through a building consent or a resource consent, however is a separate process.

- 9.4.3 In **S377.1**, **S377.2**, and **s377.10 Toka Tū Ake EQC** seek changes to an objective and two policies to better consider natural hazards. Firstly, it seeks to include resilience to natural hazards in proposed *Objective 3.3.7 Well-functioning urban environment*. It comments that one of the future effects of climate change is likely to be worsening risk from some natural hazards and Canterbury is at risk from natural hazards that will not be affected by climate change especially earthquakes. This submission point (377.1) is addressed within the strategic directions s 42A report prepared by Sarah Oliver.
- 9.4.4 It also seeks to include a definition of acceptable risk in existing *Policy 5.2.2.1.1 Avoid new development where there is unacceptable risk* because it is important to clearly define what level of risk to life and property is acceptable for all natural hazards to avoid confusion and ensure consistent application of rules and policies. It suggests the following definition: *‘an acceptable risk is present where it is generally accepted by society, and the risk posed is commensurate with other risks that are faced daily. When determining if an acceptable risk is present, the following criteria shall be considered: - Development can occur with limited controls or restrictions; and – Assessments and monitoring of the natural hazard and climate change risks is undertaken to allow increases in risk to be managed’*. In my view, while there is potential to include a definition specific to all natural hazards, I am mindful that what is ‘acceptable’ would vary depending on the hazard for instance it would be different for slope instability and the HFHMA. I do not consider the suggested definition to be appropriate. To an extent ‘acceptable’ is already clear in the framework as the policies, rules and definitions indicate what the risk is and what development (if any) is appropriate.
- 9.4.5 Finally, it seeks to remove ‘b’ ‘i’ in existing *Policy 5.2.2.2.1 Flooding* which states ‘in the High Flood Hazard Management Area: provide for development of a residential unit on residentially zoned land where the flooding risk is predominantly influenced by sea-level rise and where appropriate mitigation can be provided that protects people’s safety, well-being and property from unacceptable risk’. It comments that residential properties should not be developed in areas where sea-level rise will impact them. *Policy 5.2.2.2.1 ‘b’* allows for one unit to be established per site in the HFHMA where the flooding risk is predominantly influenced by sea level rise. I have considered the key findings of the Environment Court in Waikanae Land Co. I consider the request would go

beyond restricting intensification under MDRS and Policy 3, and would further reduce development rights.

9.4.6 **Plain and Simple Ltd** in **S627** seek that in areas where intensification is limited by natural hazards allow for temporary, modular lightweight buildings to encourage these areas to flourish in the short to medium term and to enable relocation in the long term. I consider that there are complexities in providing for temporary buildings in high hazard areas, for instance it may not be suitable for hazards such as rockfall and cliff collapse, and where it may be appropriate, an acceptable timeframe would need to be determined, especially in cases where the risk increases with climate change. In addition, remediation of the site and connection to services and provision of infrastructure would also need to be considered. The Natural Hazards QMs seek to carry over the existing Plan controls where there are significant risks. Temporary buildings have been considered through the resource consent process in the form of trigger-based consents, especially in the case of residential development in the HFHMA. Consent conditions would require the ceasing of the activity at the site as well as remediation of the site, and set a trigger point when land is no longer suitable for residential use. Given the complexities involved in my view PC14 should not provide for temporary buildings as of right (i.e. as a permitted activity), except where already enabled by the Plan, in areas with a Natural Hazards QM. I consider this best aligns with the RPS, and existing Strategic Objective 3.3.6 and the exiting natural hazards policies.

9.4.7 **David Murison** and **Henri Murison** in **S692.1** and **S693.1** and **S693.2** seek, regarding *Policies 14.2.8.5 and 14.2.8.6*, that it is universally accepted that ‘infrastructure’ includes adequate carparking and a safe and effective transport network which does not contribute to traffic congestion, and a functioning and effective stormwater and wastewater network. This is addressed in the Residential s 42A prepared by Ike Kleynbos, and the recommendation put forward is to reject this request.

Recommendation

9.4.8 For the reasons set out above I consider the following submissions should be rejected: **S290.2** from **Alex Hallatt**, **S377.1**, **S377.2**, and **s377.10** from **Toka Tū Ake EQC**, and **S627** from **Plain and Simple Ltd**.

Issue 2 – Clarification of RUO and Coastal Hazards QM

9.4.9 The **South Shore Residents Association (SSRA)** submission **S380.6** queries whether the existing Residential Unit Overlay (RUO) in the HFHMA still applies. It is not clear whether they are seeking a change to the notified provisions. This submission is responded to in the Coastal Hazard Management Area QM s 42A report (i.e. the Strategic Directions report) prepared by Ms Sarah Oliver. The RUO is carried over in the HFHMA QM and where any overlaps with other natural hazard controls both sets of controls apply. Ms Oliver's s 42A report therefore recommends that the submission be rejected.

Issue 3 – More controls in areas at risk of flooding

9.4.10 A number of submitters are concerned that intensification will worsen flooding impacts and consider PC14 should therefore address worsening flooding, through measures such as applying a QM, retaining lower density residential zones in areas already affected by flooding, and upgrading current stormwater infrastructure.

9.4.11 In **S11.5**, **Cheryl Horrell** is concerned that impervious surfaces associated with new intensification are likely to contribute to increased surface flooding which will not prevent new homes from being flooded even with higher foundations. She also considers that homes on sunken land should be protected as a QM. Similarly, **Susanne Trim** (in **S37.3**) considers residential intensification should not occur in low lying areas in the Waimakariri flood plain, and **Nikki Smetham** (in **S112.16**) has concerns with increased stormwater. Furthermore, in **S63.91 and S63.92**, **Kathleen Crisley** seeks inclusion of a QM for properties that have private stormwater drainage systems or easements, or council should take ownership of these drainage systems. In addition, **Riccarton Bush - Kilmarnock Residents' Association** (in **S188.21, S188.22**), **Darin Cusack** (in **S580.6, S580.7**), **Tony Dale** (in **S679.9**), and **Alan Ogle** (in **S876.22 and S876.24**) seek that intensification in areas where flooding is frequent and serious, where there is no immediate plan to mitigate, should be prevented by making those areas a QM. They are concerned that more intensification in these areas will allow greater site coverage and introduce more impermeable surfaces which will exacerbate flooding problems.

9.4.12 **Danielle Barwick** (in **S296.1**) seeks that the stormwater and wastewater infrastructure is upgraded to better service existing and proposed future needs before allowing increased housing density. Similarly, in **S480.4**, **Selma Claridge**, seeks that the stormwater drains are fixed before PC14 rezoning occurs, and **Maureen Kerr** (in **S868.3**) seeks to address existing issues of flooding. In **S644.1, S644.7**, **Fay Brorens** seeks to retain precautions around natural hazards including, flooding. In **S875.2**, **Philippa Rutledge**, seeks to include a QM in medium density areas for stormwater

infrastructure that has not been upgraded within the last 20 years. She considers the health and well-being of people in s5 should not be diminished as a result of stormwater discharges.

- 9.4.13 **Robert J Manthei** (in **S200.10**), **Ross Gray for Christchurch Civic Trust on behalf of Christchurch Civic Trust** (in **S908.4**) seek that PC14 incorporate regulations mandating Christchurch become a sponge city to alleviate flooding problems through water sensitive urban design such as green roofs, rain gardens, and permeable pavements. Similarly, in **S793.5**, **Fiona Bennetts** seeks to re-wild some parts of the city that flood every time there is heavy rainfall.
- 9.4.14 Submitter **Alex Hallatt** in **S290.2** seeks to prepare for more heavy rain events, higher tides by preventing building in areas that have flooded in the last 20 years or are predicted to flood in the next 50 years.
- 9.4.15 In **S377.8**, **S377.9**, **S377.12**, and **S377.13**, **Toka Tū Ake EQC**, seeks that restricting density of development in MRZ and HRZ which intersect the FMA is considered.
- 9.4.16 In **S1086.1**, **Christian Jordan** is opposed to the increased height limit of buildings given that Christchurch is on an aquifer flood plan and subject to earthquakes.
- 9.4.17 Mr Norton's evidence provides a detailed response to concerns around flooding. He outlines that increases to flood risk in localised areas could result from intensification enabled by PC14, along with increased demand on the Council's stormwater network infrastructure. He notes the HFHMA, FPMA, waterbody setback and Coastal Management Area QMs will reduce the number of additional dwellings being constructed within areas of stormwater, coastal and flood related hazards, but will not necessarily prevent adverse flooding effects occurring as a result of increases in impervious surfaces caused by high uptake of the newly zoned MRZ areas.
- 9.4.18 He considers that existing powers exercised by the Council to control network connections will mitigate some of the adverse effects of flooding caused by intensification until such time as Council is in a position to insert a stormwater network constraint QM into the District Plan. He confirms that currently, Council does not have sufficient, high quality data to support a stormwater network constraint QM targeting areas that contribute the worst-affected, frequently-affected and most difficult/costly to mitigate flood prone areas. I accept this advice.
- 9.4.19 Including a new stormwater flooding QM would require a full assessment, which has not been undertaken. A QM of this nature is unlikely to be considered as a s6 matter of national importance which only refers to the management of significant risks from natural hazards. It would then fall to

be considered as an 'other matter' requiring a comprehensive assessment for it to be accepted as a QM. I do not recommend progressing a QM of this nature given that the level of information required is not yet available. As set out by Mr Norton, the above-mentioned QMs and existing powers exercised by Council will to some extent address flooding associated with PC14. PC14 proposes the HFHMA and FPMA, Coastal Hazard Management Area and Tsunami Risk Area as QMs which would ensure inappropriate intensification does not occur in these most at risk areas, providing for the health and safety of communities, in line with part 2 of the RMA, the RPS, Strategic Objective 3.3.6 and the natural hazards policies in the plan. The existing FMA extent and provisions in the Plan, while not limiting the density or height of development, and not considered appropriate as a QM, would still apply to intensification development in the FMA and would apply controls in terms of floor levels and earthworks.

- 9.4.20 In **S519.5, James Carr** seeks a requirement that new houses in areas at risk from sea level rise or increasing flood risk be designed to be easily relocated (not necessarily in one piece). The response to Plain and Simple Ltd in S627 is equally applicable here.

Recommendation

- 9.4.21 For the reasons set out above, I recommend the above submissions be rejected.

Issue 4 – Site and area specific changes related to flooding

- 9.4.22 In **S11.8, Cheryl Horrell** seeks to apply HFHMA and FPMA QM to Bluebell Lane. I note this street is not within these two QM areas, though is within the Fixed Minimum Floor Level Overlay within the FMA in the Plan. Updating the HFHMA and FPMA is not within scope of PC14. I note Council are progressing a plan change (PC17) to update the FMAs in the city which would update both the flood mapping and provisions.
- 9.4.23 In **S73.1, Helen Spear** has not included any text in her submission only a map shown below and there is no decision sought. A phone call and follow up email was made to the submitter on 12.05.2023 outlining that the submission was missing the decision sought and reasons for the

decision, however no response was provided.



9.4.24 A few submitters seek to not apply the HRZ to certain streets/areas due to concerns with worsening existing flooding issues. In **S94.1, Rebecca Perkins** seeks to not apply HRZ to areas close to Papanui Road due to flood risk and stormwater issues. Similarly, in **S 329.1, Dominic Mahoney** seeks to remove HRZ from Perry Street given that much of this street is within the FMA and intensification would expose more people and property to the effects of flooding. Furthermore, **Keri Murison, David Murison, and Henri Murison** (in **S668.1, S668.2, S668.4, S692.1, S692.3, S692.9, S692.10, S693.3, S693.9, S693.10**) seek to change HRZ zoning to MRZ in Strowan and apply a QM due to stormwater flooding concerns. **John Hudson** seeks (in **S901.15**) to change HRZ zoning to MRZ in Watford Street due to existing unresolvable flooding issues.

9.4.25 Mr Norton's comments and my comments under *Issue 3* above are equally applicable here. As set out by Mr Norton, the intensification enabled under PC14 will likely increase costs to Council and the community, however Council does not currently have sufficiently robust information to alter this outcome. In my view there is not enough evidential basis to seek to undo the proposed HRZ zoning of the abovementioned streets and areas under PC14. The future plan change (PC17) on flooding may result in this issue being addressed comprehensively at a city wide scale and not only in relation to intensification.

9.4.26 Some submitters seek to apply a QM in certain streets/areas due to flooding concerns. In **S246.1, and S246.2, Robert Black** seeks to include the FMA as QM, particularly in Merivale. Similarly, in **S583.3, S583.6, and S583.7, Jaimita de Jongh** seeks to apply a QM to areas that drain into the mid-Heathcote Ōpāwaho. In **S653.10, David McLauchlan** seeks to apply a QM to the Palmside Street

flooding. In addition, In **S794.2, S794.3, and S794.8 Greg Partridge** seeks to apply a QM to South Richmond due to flooding risk. Mr Norton's comments and my comments under *Issue 3* above are equally applicable here.

9.4.27 In **S680.2, and S680.3, Bernard Johnston and Janette Dovey** have concerns that a significant increase in density, with associated increase in hardstand and stormwater discharge, will exacerbate the existing flooding problems experienced at the base of the Hills/valleys and adjacent to the Heathcote River. Mr Norton's comments and my comments under *Issue 3* above are equally applicable here.

9.4.28 In addition, Mr Norton discusses in his evidence that steep hillside catchments have issues relating to erosion, slope stability, under-runners (caused by the erosion of subsurface soil layers), drain blockages and high velocity overland flows. This issue is discussed in more detail under *Issue 6* below in response to Environment Canterbury submissions S689.75, S689.76, and S689.77. I accept this advice.

Recommendation

9.4.29 For the reasons set out above, I recommend the above submissions be rejected.

Issue 5 – Removal of flooding overlay

9.4.30 In **443.12, Summerset Group Holdings Limited** seeks to remove the natural hazards QM from the Summerset Cavendish site (147 Cavendish Road). Mr Norton comments that this is an area where there are significant stormwater infrastructure works taking place. This site does not contain the HFHMA or FPMA overlays and therefore would not be subject to these QMs. The site is adjacent to a watercourse and Mr Norton considers the site should remain subject to the waterbody setback QM for the very reasons that the setback was put in place. I accept this advice. I note the issue relating to the waterbody is considered under the Waterbody Setback s 42A report prepared by Ms Anita Hunsbury. Her report indicates that the waterbody has been removed from the site at 147 Cavendish Road (through resource consent) and it is proposed to remove the water body setback QM overlay from the maps in favour of relying on the existing Chapter 6 setback rules.

9.4.31 In **S834.20 – S834.24 , Kāinga Ora – Homes and Communities, and S877.4, Otautahi Community Housing Trust** seek that the mapped Hazard Management Areas are removed from within the District Plan and instead hold this information in non-statutory GIS maps. Kāinga Ora consider that including flood hazard areas in the Plan ignores the dynamic nature of such hazards and seeks that

the rules are not linked to static maps. They comment that other councils adopt a set of non-statutory hazard overlay maps, with the advantage being the ability to operate a separate set of interactive maps which are continually subject to improvement and updates outside of and without reliance on a Schedule 1 process. They furthermore note there is no formal requirement for hazard maps to be included within the Plan.

9.4.32 Managing natural hazards is a matter of national importance in s6 of the RMA, it is a function of district councils in s31 of the RMA and is a requirement of the RPS. The RMA provides a way that material that sits outside of the Plan that changes over time can be “incorporated by reference” into the Plan. The changes to that material that is incorporated by reference are then effective in that changed form in the Plan. This is found in clauses 30-35 in Schedule 1 of the RMA. The District Plan can “incorporate by reference” “written material that deals with technical matters and is too large or impractical to include in, or print as part of, the plan or proposed plan” (30). That material has legal effect as part of the Plan. Amendments to that material will have legal effect as part of the Plan if an approved plan change states that the amendment to the material has that effect (31). The Council is required to keep a “certified copy” of the material incorporated by reference, and of any changes to it (32). However, clause 34 requires that before the Council notifies a change to the Plan under clause 5 of Schedule 1 that incorporates material by reference and states that amendment to the material incorporated by reference becomes part of the Plan, the Council should give people a reasonable opportunity to comment on that material. The material incorporated by reference must then be always publicly available for inspection (35).

9.4.33 It appears possible to apply those “incorporation by reference” provisions to the Council keeping some sort of publicly available searchable database of natural hazard information that changes over time, as hazard information gets updated. I consider that assessing the options for, and setting up, the Council’s requirements for what information will be in the database, the standards that must be reached for the quality of information that gets loaded to it, and building the database itself is too significant a body of work to be undertaken for PC14, and would be best undertaken as a future plan change.

Recommendation

9.4.34 For the reasons set out above, I recommend the above submissions be rejected.

Issue 6 – Include controls for areas susceptible to non-coastal erosion

- 9.4.35 In **S154.1**, and **S154.2**, **Ōpāwaho Heathcote River Network (OHRN)** seek to include a High Soil Erosion Risk area QM as indicated in the Land and Water Regional Plan.
- 9.4.36 In **S689.75**, **S689.76**, and **S689.77**, **Environment Canterbury** seek new QMs for Slope Instability Management Areas - take into account Trangmar's erosion classes and exclude "severe" erosion class land from further subdivision and development. They seek that the upper Halswell River catchment areas are covered by a QM that prevents further intensification because of inadequate stormwater infrastructure and downstream flooding effects.
- 9.4.37 Mr Norton considers that the Halswell River catchment is not dissimilar to the other Christchurch rivers in terms of flooding effects and existing infrastructure provision. For a QM to be introduced in Halswell and not in the Heathcote, Avon or Styx catchments it would result an inequitable outcome and he therefore recommends the relief sought in this submission should be rejected. I accept this advice. Mr Norton's comments and my comments under *Issue 3* above are equally applicable here.
- 9.4.38 Mr Dykstra considers that intensification of hillside land that is subject to severe erosion hazard may not be appropriate (at least not without significant erosion mitigation measures). In his view there is a clear link between slopes that are subject to instability (e.g., landslides or rockfall) and high levels of erosion, and he considers hillside erosion to be a form of slope instability. He notes that landslides and other forms of slope instability tend to cause high levels of soil erosion and sedimentation, and that slopes that are subject to erosion are more likely to experience other forms of instability (landslips, rockfall etc.). Taking this into account, he does not consider that the suggested new QM of severe erosion class areas is necessary given current Plan policies (such as 5.2.2.1.1, 5.2.2.1.2, 5.2.2.1.4) that would apply around the existing SMAs. He considers this should be sufficient to avoid any potential increase in risk due to slope instability (including erosion) given that Chapter 5 – Natural Hazards provisions would tend to restrict any subdivision or development where there is likely to be increased risk, or transfer of risk due to hillside erosion. I accept this advice.
- 9.4.39 I note the proposed slope instability QMs are considered s 6(h) matters under the Act (management of significant risks from natural hazards) as these QMs apply where the risk from natural hazards is considered to be unacceptable and such risks cannot practically be reduced to acceptable levels. The existing Plan provisions seek that new activities in those areas are generally to be avoided. High erosion hazard, in my view, would not as comfortably fit as a s 6h matter, and would fall to be considered an 'other matter' which requires a comprehensive assessment which

has not been undertaken. I am satisfied that the proposed slope instability QMs would address the most concerning slope instability hazards to ensure inappropriate development does not occur in these areas.

Recommendation

9.4.40 For the reasons set out above, I recommend the above submissions be rejected.

Issue 7 – Include controls for liquefaction and earthquake risk

9.4.41 A number of submitters have commented on the need to consider liquefaction risk in PC14. **Shirley van Essen** (in **S54.2** and **S54.8**) seeks that TC3 land remain zoned Residential Suburban. Similarly, **Robert Black** (in **S246.4**), and **William Bennett** (in **S255.5**, and **S255.6**) seek that TC3 land is included as a QM. In addition, **Sandi Singh** (in **S440.5**) seeks that both TC3 and TC2 land is considered. **Glenda Duffell** (in **S779.1**) seeks that MRZ is not progressed in TC3 and TC2 land. **Maureen Kerr** (in **S868.3**) seeks that liquefaction risk is addressed. In **S898.2**, **Denis McMurtrie** seeks to retain the RS zone in South and East Harewood Road and Main North Road around Papanoa Street, Strowan due to peaty soils and concerns with sinking of land and poor drainage. In **S902.7** the **Waipuna Halswell-Hornby-Riccarton Community Board** seek land stability and the height of the water table is considered as a qualifying matter.

9.4.42 A few submitters would like to see geotechnical reports carried out as part of PC14. In **S707.2**, **Isobel Foyle** seeks that geotechnical investigation reports are undertaken for all suburbs before PC14 takes effect. Similarly, in **S902.5** the **Waipuna Halswell-Hornby-Riccarton Community Board** seek technical assessments are undertaken citywide on geotechnical stability.

9.4.43 Some submitters would like PC14 to consider earthquake risk. **Christina Stachurski** (in **S763.1**), and **Mary O'Connor** (in **S778.1**, **S778.2**, and **S778.3**) seek to include earthquake risk as a QM. In **S794.2**, **S794.3**, **S794.8**, **Greg Partridge** seeks that a QM is applied to South Richmond due to earthquake risk. In **S867.1**, **Robina Dobbie** seeks to include a QM in the CBD and other vulnerable areas of land for managing natural hazards due to the dangers from earthquakes, especially the alpine fault. In **S902.3** and **S902.4** the **Waipuna Halswell-Hornby-Riccarton Community Board** seek that the effects of the major earthquake sequence suffered by Christchurch in 2010-11 could be regarded a qualifying matter for the whole city, or at least the most susceptible TC3 land. In **S1086.1**, **Christian Jordan** is opposed to the increased height limit of buildings given that Christchurch is on

an aquifer flood plain and subject to earthquakes. The flood plain aspect is considered further above.

- 9.4.44 Council's Principal Geotechnical Advisor Jesse Dykstra has provided specialist input on liquefaction and earthquake risk for PC14. He comments that after the Canterbury earthquake sequence (**CES**) MBIE mapping set out where residential areas on flat land had been red zoned (not suitable for residential development) or assigned a technical category (**TC**). The aim of establishing the TCs was to focus geotechnical investigations to whether they were most needed following the CES, and to provide guidance on appropriate foundation solutions. He notes it was anticipated that over time the TCs would become less relevant or useful as additional data from more detailed ground investigations and liquefaction assessments became available.
- 9.4.45 He considers the TCs are not an accurate hazard map, are not based on the most recent liquefaction vulnerability information, and are not a suitable basis for strategic land-use decisions. In addition, in his evidence he outlines the background to the existing Liquefaction Management Area (**LMA**) in the Plan, and comments that the LMA is not based on the most recent liquefaction vulnerability information and is not an accurate representation of the hazard at higher resolutions (i.e. individual neighbourhoods down to specific sites). He outlines that in this regard, the LMA has now largely been superseded by the Christchurch City Council [Liquefaction Vulnerability Category \(LVC\) map](#) which is the most up-to-date liquefaction hazard map, based on the latest data available.
- 9.4.46 Mr Dykstra comments that the LVC map does not interpret the data for any specific purpose (e.g. planning, consenting, IDS), and is therefore not suitable to supersede the TCs or replace the LMA hazard overlay in the CDRP. He considers that the Plan should be updated to replace the LMA with the LVC assessment and it could include three hazard levels consisting of high, medium and possible with appropriate planning rules managing each hazard level, similar to the slope hazard overlays. However, with respect to PC14, it could be appropriate to include a new QM which reflects the high liquefaction vulnerability. He indicates this would require significant testing to determine if areas that are within the high vulnerability area are not suitable for intensification. I accept this advice.
- 9.4.47 I consider including a QM addressing liquefaction and earthquake risk would likely be considered an 'other matter' requiring a comprehensive and detailed assessment. As outlined by Mr Dykstra a significant amount of further work would need to be undertaken to provide the required

evidence basis. Noting that this hazard would not only be relevant to intensification it may be best addressed through a separate plan change.

Recommendation

9.4.48 For the reasons set out above, I recommend the above submissions be rejected.

Issue 8 – Include overlay for rockfall protection structures within slope instability areas

9.4.49 In submission **S231.1, Phil Elmey** seeks that Council adopt the Building Code guidance document for design of passive protection structures as an acceptable method of reducing rockfall hazard on a site-specific basis. He considers the inability to take into account rockfall mitigation in RHMA1 and 2 and the use of GNS Life risk (AIFR) models in determining site-specific suitability for habitation and development is unworkable and considers this approach needs to be changed to be consistent with that used by Territorial Authorities in other areas in New Zealand and overseas when dealing with rockfall hazard.

9.4.50 In his evidence, Mr Dykstra comments that the above submission appears to refer to the document published as Rockfall: Design considerations for passive protection structures. While a useful design guidance for passive rockfall protection structures (and currently referenced in the IDS), he considers that adopting the document is not an acceptable method for reducing site-specific rockfall hazard. His evidence goes into detail and outlines that while passive rockfall protection may reduce the short-term risk, the actual hazard remains. I accept this advice.

9.4.51 In submission **S240.1, Ruth Dyson** and submission **S368.1, Karen Theobald** request that for all homes in the Port Hills which have had rockfall protection structures erected there should be an additional overlay in the District Plan identifying that even though these homes are in a rockfall risk area, that these specific homes have rockfall protection structures in place. In his evidence, Mr Dykstra provides a helpful outline of the existing slope instability areas, the AIFR certification and the issue with reliance on existing hazard mitigation works. He considers that existing hazard mitigation works (including rockfall protection structures) are not an appropriate basis for an additional slope hazard overlay, because the hazard itself remains. I accept this advice. In my view intensification would not be appropriate as of right within these high hazard areas and an overlay outlining where mitigation works have been undertaken would result in unacceptable costs in terms of health and safety of people and communities.

Recommendation

9.4.52 For the reasons set out above, I recommend the above submissions be rejected.

10 MINOR AND INCONSEQUENTIAL AMENDMENTS

10.1.1 Pursuant to Schedule 1, clause 16 (2) of the RMA, a local authority may make an amendment, without using the process in this schedule, to its proposed plan to alter any information, where such an alteration is of minor effect, or may correct any minor errors.

10.1.2 Any minor and inconsequential amendments relevant to the Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions are listed in the appropriate sections of this s 42A report.

10.1.3 The recommended amendments are set out in the tracked changes versions of the applicable chapters, which are provided at Appendix A.

11 CONCLUSIONS AND RECOMMENDATIONS

11.1.1 Having considered all of the submissions and reviewed all relevant instruments and statutory matters, I am satisfied that the Plan Change 14 Industrial Interface QM, the Significant and Other Trees QM, and the Natural Hazards QMs provisions, with the amendments I am suggesting, will:

- a. result in an amended policy that better achieves the operative and proposed objectives;
- b. result in an amended rules that better implements the operative and proposed policies;
- c. give effect to relevant higher order documents, in particular those outlined in section 5 of this report; and
- d. more appropriately achieve the District Plan objectives and better meet the purpose of the Act than the current Plan provisions.

11.1.2 For the reasons set out in the Section32AA evaluation included throughout this report, I consider that the proposed objectives, policies and provisions, with the recommended amendments, will be the most appropriate means to:

11.1.3 Achieve the purpose of the RMA where it is necessary to revert to Part 2 and otherwise give effect to higher order planning documents, in respect to the proposed objectives, and

11.1.4 Achieve the relevant objectives of the PDP, in respect to the proposed provisions.

11.1.5 I recommend therefore that:

- a. PC14 be approved with modifications as set out in the attached Appendix B; and
- b. Submissions on PC14 be accepted or rejected as set out in Appendix A to this report.

APPENDIX A - TABLE OF SUBMISSIONS WITH RECOMMENDATIONS

Industrial Interface QM – Issue 1 – Removal of QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
116.4 – 116.6	Russell Fish	Review the 'Industrial Interface' Qualifying Matter, with a view to remove the designation where it is not already an historically established principle.		Reject
399.3 + 399.4	Peter Earl	Oppose the Industrial Interface Qualifying Matter Area height standard.		Reject
834.87 – 834.90	Kāinga Ora – Homes and Communities	Delete the Industrial Interface Qualifying Matter and all associated provisions.	FS2044.60, FS2045.63, FS2054.10, FS2044.61, FS2045.64, FS2054.11, FS2044.62, FS2045.65, FS2045.66, FS2054.12, FS2044.63, FS2045.67, FS2052.19, FS2054.13	Reject
834.166 + 834.167	Kāinga Ora – Homes and Communities	Delete Objective 14.2.12 and Policy14.2.12.1 and the Industrial Interface Qualifying Matter and all associated provisions.	FS2049.82, FS2054.14, FS2049.83, FS2054.15	Reject
834.169	Kāinga Ora – Homes and Communities	14.3 How to interpret and apply the rules – Clause f. xvi. f. There are parts of residential zones where the permitted development, height and/or density directed by the MDRS or Policy 3 of the NPS-UD may be modified by qualifying matters. These are identified in detail in Chapter 6.1A and the Planning Maps, and include the following: ... xxi. Industrial Interface	FS2031.100, FS2037.24, FS2049.85, FS2051.99, FS2052.24, FS2055.18, FS2059.20, FS2071.12	Reject
834.171	Kāinga Ora – Homes and Communities	Delete 7m height rule in the Industrial Interface Qualifying matter area and apply relevant MRZ or HRZ heights.	FS2037.25, FS2049.87, FS2059.21, FS2085.33	Reject

834.179	Kāinga Ora – Homes and Communities	D11 – industrial interface QM Delete the Industrial Interface Qualifying Matter and all associated provisions.	FS2049.95, FS2054.16	Reject
834.184	Kāinga Ora – Homes and Communities	14.5.2.3(iv) Industrial interface... Delete 14.5.2.3(iv)	FS2049.101, FS2059.22	Reject

Industrial Interface QM – Issue 2 – More controls under QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
734.7	Marie Byrne	Increase the Residential Industrial Interface.		Reject

Industrial Interface QM – Issue 3 – Site and area specific changes relating to QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
2.7 – 2.13	Greg Olive	Qualifying Matter Residential Industrial Interface is removed from 419 Halswell Junction Road		Reject
243.1	Ravensdown Limited	Oppose the HRZ zoning of the land to the southwest and south of the Christchurch Works (312 Main South Road). Seeks that this land is rezoned to MRZ.	FS2082.201	Reject
243.5	Ravensdown Limited	Seeks the inclusion of a rule whereby permitted residential development within a 'buffer area' between industrial and residential interface, must be the lesser of 7m or 2-storeys and include a rule requiring acoustic installation to be installed in all residential developments, within the specified buffer area from industrial zones.	FS2082.204	Reject
243.6	Ravensdown Limited	Where the Industrial Heavy zone immediately adjoins a residential zone, apply a 240m Industrial Heavy zone / residential interface buffer from the Industrial Heavy zone boundary over adjoining residential zones.	FS2082.205	Reject
788.3 + 788.9	Marc Duff	Remove HRZ from area surrounding Ravensdown Hornby a Fertiliser factory		Reject
823.206	The Catholic Diocese of Christchurch	Amend the planning maps to identify a Brownfield Precinct overlay, over the Industrial General zoned school site [2 Lydia Street, Papanui]; and delete the Industrial Interface overlay for those properties with frontage to Northcote Road or Lydia Street.	FS2037.1438, FS2045.379, FS2082.1216	Reject
853.12	Lyttelton Port Company Limited	Planning map 47 Qualifying Matter – Industrial Interface Extend “Qualifying Matter – Industrial Interface” to cover spatial extent of land identified at Appendix 3 (below) and include “Inland Port” sub-area.		Reject

Industrial Interface QM – Issue 4 – Specific changes to proposed QM provisions				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
212.10	The Fuel Companies - BP Oil, Z Energy and Mobil Oil	<p>Replace 14.2.12 Objective as follows:</p> <p>New residential development is not adversely affected by noise generated from industrial activities and the development does not affect the operation of industrial activities within industrial zones.</p> <p><u>New residential development is compatible with existing lawfully established industrial activities.</u></p>		Reject
212.11	The Fuel Companies - BP Oil, Z Energy and Mobil Oil	<p>Amend 14.2.1.2.1 Policy as follows:</p> <p>a. Restrict new residential development of three or more storeys within proximity to <u>existing lawfully established industrial activities and</u> industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or <u>compromise</u> adversely affect the <u>amenity</u>, health and safety of residents, unless mitigation sufficiently addresses the effects</p>		Accept in part
243.3	Ravensdown Limited	Amend proposed Objective 14.2.12 so that it recognises the full suite of potential effects from industrial activities on new residential development, not just noise.	FS2082.203	Reject
853.15	Lyttelton Port Company Limited	<p>New discretionary activity in Residential Hills Zone.</p> <p>Insert as follows:</p> <p>Any building for a residential activity that does not meet Rule [x] Building height within the Industrial Interface Qualifying Matter Area, Inland Port Sub-Area.</p>		Reject
853.16	Lyttelton Port Company Limited	<p>New standard for building height</p> <p>Insert as follows:</p>		Reject

		Any building for a residential activity within the Industrial Interface Qualifying Matter Area, Inland Port Sub-Area: 7 metres or 2 storeys, whichever is the lesser.		
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Industrial Interface QM – Submissions in support			
Sub. No.	Submitter name	Summary of relief sought	Further submissions
175.1	Winstone Wallboards Limited (WWB)	Proposed Industrial Interface [Qualifying] Matter is entirely appropriate in managing reverse sensitivity matters.	
243.4	Ravensdown Limited	Retain Policy 14.2.12.1 as notified.	
689.53	Environment Canterbury / Canterbury Regional Council	[Retain Objective 14.2.12 as notified]	FS2037.1075
689.54	Environment Canterbury / Canterbury Regional Council	[Retain Policy 14.2.12.1 as notified]	FS2037.1076
689.73	Environment Canterbury / Canterbury Regional Council	[Retain the following Qualifying Matters as notified]: ... <ul style="list-style-type: none"> Residential Industrial Interface 	FS2012.3, FS2012.6, FS2037.1095, FS2056.22, FS2075.16, FS2082.433
853.13	Lyttelton Port Company Limited	Retain objective 14.2.12 as notified.	
853.14	Lyttelton Port Company Limited	14.2.12.1 Policy – Managing effects on industrial activities a. Restrict new residential development of three or more storeys within proximity to industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or adversely affect the health and safety of residents, unless mitigation sufficiently addresses the effects. Retain policy as notified.	
902.24 – 902.26	Waipuna Halswell-Hornby-Riccarton Community Board	[Retain Residential Industrial Interface Qualifying Matter]: [That] there is a strong constraint on residential height and a wide buffer provided between residential areas and any industrial development.	FS2037.681, FS2082.1286

Significant and Other Trees QM – Issue 1 – Less controls under QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
405.1	Blake Quartly	Reduce as much as possible the adjustments to the Government's original plan.		Reject
814.14	Carter Group Limited	Oppose the new definition for Dripline. Seek that the original definition is retained.	FS2082.844	Reject
814.38	Carter Group Limited	Oppose the definition of Tree protection zone radius. Seek that it is deleted.	FS2082.868	Reject
814.111	Carter Group Limited	Oppose 9.4.1(c). Seek that this is deleted.	FS2082.941	Reject
814.112	Carter Group Limited	Oppose 9.4.2.4. Seek that this be deleted.	FS2082.942	Reject
814.113	Carter Group Limited	Oppose 9.4.3(a) & (f). Seek that these be deleted.	FS2082.943	Reject
814.114	Carter Group Limited	Oppose 9.4.4 rules. Seek that these are deleted.	FS2082.944	Reject
823.34	The Catholic Diocese of Christchurch	Definition 'Tree protection zone radius'. Delete	FS2037.1266, FS2045.207, FS2082.1119	Reject
834.26	Kāinga Ora – Homes and Communities	1. Retain Significant and Other Tree Qualifying Matter. 2. Amend Rule 9.4.4.1.1 P12 as follows: Rule 9.4.4.1.1 P12 - Activities shall be undertaken by, or under the supervision of, a works arborist. employed or contracted by the Council or a network utility operator.	FS2037.3, FS2044.23, FS2045.22, FS2049.14, FS2056.18	Reject

877.8	Otautahi Community Housing Trust	Retail Significant and Other Tree Qualifying Matter. Amend Rule 9.4.4.1.1 P12 as follows: Rule 9.4.4.1.1 P12 - Activities shall be undertaken by, or under the supervision of, a works arborist. employed or contracted by the Council or a network utility operator.	FS2082.1236, FS2082.1304	Reject
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Significant and Other Trees QM – Issue 2 – More controls under QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
654.2 + 654.3	Wendy Fergusson	Strengthen the requirements for trees		Reject
741.1 + 741.2	Lower Cashmere Residents Association	[That the removal] of mature trees [is] not allowed	FS2063.89, FS2064.86, FS2082.491, FS2082.492	Reject
794.6	Greg Partridge	The submitter opposes the reduction in Christchurch's tree canopy cover by housing intensification. The Council should seek an immediate amendment to the Enabling Housing Supply and Other Matters Act to be implemented in order for regulations to be introduced that protect the city's tree canopy from being decimated by property developers.	FS2037.729	Reject
900.4	Summit Road Society	We support protecting our Significant Trees and existing tree canopy cover.		Reject

Significant and Other Trees QM – Issue 3 – Site and area specific changes to QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
44.7	The Riccarton Bush Trust	Amend 9.4.4.1.1 to permit earthworks within 10 metres of the base of any tree in the Riccarton Bush Significant Trees area.	FS2037.72	Accept in part
150.25	Ceres New Zealand, LLC	Delete the Horizontal Elm (Ulmus glabra Horizontalis) tree located on 25 Peterborough Street (Significant Tree #274) from Appendix 9.4.7.1 Schedules of significant trees (Christchurch City and Banks Peninsula).		Reject
150.26	Ceres New Zealand, LLC	Delete the Significant and other Trees overlay applied to 25 Peterborough Street and update Planning Map 32C and H10 accordingly.		Reject
499.1	Daniel John Rutherford	Please remove our Tasmanian blue gum (at 20 Macmillan Ave) from the significant tree register.		Reject
499.2	Daniel John Rutherford	Please don't go ahead with considering the significant trees to be a qualifying matter.		Reject
705.2	Foodstuffs	Amend to exclude the protected tree on Stanmore Road frontage at 300,304 Stanmore Road and 9,11 Warwick Street	FS2037.566	Reject
814.115	Carter Group Limited	Amend Appendix 9.4.7.1, so as to delete the scheduling of the common lime and variegated sycamore trees at 32 Armagh Street.	FS2082.945	Reject
874.31	Daresbury Ltd	[Seeks that council delete subchapter 9.4]	FS2037.643	Reject
1011.1	John Hardie On Behalf Of Trustee of family trust	Oppose all restrictions on the boundary of its property at 48 Rata Street.	FS2085.48	Reject

Significant and Other Trees QM – Submissions in support			
Sub. No.	Submitter name	Summary of relief sought	Further submissions
23.5	Linda Barnes	[Retain Schedule of Significant Trees as a Qualifying Matter]	
145.14	Te Mana Ora/Community and Public Health	Te Mana Ora supports the different proposals to support tree cover in the Housing and Business Choice Plan Change Consultation Document, including to update tree setbacks to better protect individual trees and to incentivise more tree planting, Financial Contributions, and the Schedule of Significant and Other Trees becoming a Qualifying matter.	
145.16	Te Mana Ora/Community and Public Health	Te Mana Ora supports the different proposals to support tree cover in the Housing and Business Choice Plan Change Consultation Document, including to update tree setbacks to better protect individual trees and to incentivise more tree planting, Financial Contributions, and the Schedule of Significant and Other Trees becoming a Qualifying matter.	
180.3	Josiah Beach	[F]ully support[s] the Significant and other Trees Qualifying Matter.	FS2037.231
519.14	James Carr	Trees - especially big street trees are really important, especially for energy savings, mental health and also for encouraging active transport modes.	FS2037.522
834.25	Kāinga Ora – Homes and Communities	6.1A 1. Retain Significant and Other Tree Qualifying Matter.	
834.27	Kāinga Ora – Homes and Communities	1. Retain Significant and Other Tree Qualifying Matter.	FS2037.4
834.28	Kāinga Ora – Homes and Communities	RD1-RD8 1. Retain Significant and Other Tree Qualifying Matter.	FS2037.5
834.29	Kāinga Ora – Homes and Communities	1. Retain Significant and Other Tree Qualifying Matter.	

876.17	Alan Ogle	<p>Support the provisions for tree canopy and financial contributions, noting:</p> <ol style="list-style-type: none"> 1. Protections for trees, and incentives for planting more trees, should be part of the changes proposed in PC14. 2. Any financial contributions made to compensate for tree removal should be required to be spent in the area where trees are removed to, at least, replace what was there with equivalent planting. 	FS2083.26
876.18	Alan Ogle	<p>Support the provisions for tree canopy and financial contributions, noting:</p> <ol style="list-style-type: none"> 1. Protections for trees, and incentives for planting more trees, should be part of the changes proposed in PC14. 2. Any financial contributions made to compensate for tree removal should be required to be spent in the area where trees are removed to, at least, replace what was there with equivalent planting. 	FS2083.27
876.19	Alan Ogle	<p>Support the provisions for tree canopy and financial contributions, noting:</p> <ol style="list-style-type: none"> 1. Protections for trees, and incentives for planting more trees, should be part of the changes proposed in PC14. 2. Any financial contributions made to compensate for tree removal should be required to be spent in the area where trees are removed to, at least, replace what was there with equivalent planting. 	FS2083.28
876.20	Alan Ogle	<p>Support the provisions for tree canopy and financial contributions, noting:</p> <ol style="list-style-type: none"> 1. Protections for trees, and incentives for planting more trees, should be part of the changes proposed in PC14. 2. Any financial contributions made to compensate for tree removal should be required to be spent in the area where trees are removed to, at least, replace what was there with equivalent planting. 	FS2083.29

876.21	Alan Ogle	Support the provisions for tree canopy and financial contributions, noting: 1. Protections for trees, and incentives for planting more trees, should be part of the changes proposed in PC14. 2. Any financial contributions made to compensate for tree removal should be required to be spent in the area where trees are removed to, at least, replace what was there with equivalent planting.	FS2083.30
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Natural Hazards QMs – Issue 1 – Specific changes to proposed QM provisions				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
290.2	Alex Hallatt	Amend to require all new builds to provide stormwater collection and storage, either via tanks, or using natural systems such as raingardens.	FS2082.235, FS2037.408	Reject
377.1	Toka Tū Ake EQC	Retain objective and add the following underlined: iv. The benefits of urban environments that support reductions in greenhouse gas emissions; and are resilient to <u>natural hazards</u> and the current and future effects of climate change.		Accept
377.2	Toka Tū Ake EQC	Retain the policy, but formulate and add a definition of acceptable level of risk in regard to natural hazards.	FS2082.288	Reject
377.10	Toka Tū Ake EQC	Regarding 5.2.2.2.1, remove “b. In the High Flood Hazard Management Area: provide for development of a residential unit on residentially zoned land where the flooding risk is predominantly influenced by sea-level rise and where appropriate mitigation can be provided that protects people’s safety, well-being and property from unacceptable risk”	FS2082.291	Reject
627.25	Plain and Simple Ltd	[New provisions to enable] Temporary, modular lightweight housing / buildings [in natural hazard areas]		Reject
692.2	David Murison	[Regarding policies 14.2.8.5 and 14.2.8.6] [s]uggest that it is universally accepted that ‘infrastructure’ includes adequate carparking and a safe and effective transport network which does not contribute to traffic congestion. and a functioning and effective stormwater and wastewater network.	FS2082.435	Reject
693.1 + 693.2	Henri Murison	[Regarding policies 14.2.8.5 and 14.2.8.6] suggest that it is universally accepted that ‘infrastructure’ includes adequate carparking and a safe and effective transport network which does not contribute to traffic congestion. and a functioning and effective stormwater and wastewater network.	FS2082.444, FS2082.445	Reject

Natural Hazards QMs – Issue 2 – Clarification of RUO and Coastal Hazards QM				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
380.6 + 380.7	South Shore Resident's Association (SSRA)	Clarify the interaction between the Residential Unit Overlay and the Qualifying Mater Coastal Hazard Management Areas		Reject

Natural Hazards QMs – Issue 3 – More controls in areas at risk of flooding				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
11.5	Cheryl Horrell	<i>Strengthen protections for existing homes <u>against flood risk</u></i>	FS2037.43	Reject
37.3	Susanne Trim	Special consideration to intensification proposals needs to be given due to flooding potential.	FS2037.62	Reject
63.91 + 63.92	Kathleen Crisley	That private stormwater drainage systems are included as a Qualifying Matter in the final decision on the proposed plan change.		Reject
112.16	Nikki Smetham	"[Clarify and strengthen] these matters: Increased stormwater generally "		Reject
188.21 + 188.22	Riccarton Bush - Kilmarnock Residents' Association	New Qualifying Matter for areas subject to frequent surface flooding	FS2037.258, FS2052.306, FS2082.104, FS2083.38	Reject
200.10	Robert J Manthei	"Any future version of Plan Change 14 should incorporate regulations mandating 'Sponge city' concepts, no matter what the final density targets become. The CCC should set a sponginess rating of 35%, the same as Auckland's. "	FS2037.290	Reject
290.1	Alex Hallatt	Prepare for more heavy rain events and higher tides as predicted by the Intergovernmental Panel on Climate Change.	FS2037.407	Reject

296.1	Danielle Barwick	Upgrade storm and wastewater infrastructure to better service existing and proposed future needs before allowing increased housing density.		Reject
377.8 + 377.9 + 377.12 + 377.13	Toka Tū Ake EQC	Consider restricting density of development in the High and Medium Density residential areas which intersect with the Flood Management overlay.	FS2082.289, FS2082.290, FS2082.292, FS2082.293	Reject
480.4	Selma Claridge	Fix the stormwater drains before rezoning occurs		Reject
519.5	James Carr	It might be worthwhile requiring new houses in areas at risk from sea level rise or increasing flood risk to be designed to be easily relocated (not necessarily in one piece). Again this is likely to require a wood foundation, but given that these areas typically have soft soils this would not be a bad thing.	FS2037.518	Reject
580.6 + 580.7	Darin Cusack	That further densification in areas where flooding is frequent and serious(and there is no immediate plan to mitigate) should be prevented by making those areas a qualifying matter.		Reject
644.1 + 644.7	Fay Brorens	[Retain] precautions around Natural Hazards including, flooding, liquefaction and sea level rise.		Reject
679.9	Tony Dale	I s[S]ubmit that further densification in areas where flooding is frequent and serious (and there is no immediate plan to mitigate) should be prevented by making those areas a qualifying matter.		Reject
793.5	Fiona Bennetts	"Please ensure there are more parks/gardens/walkways between medium- and high- density builds. . Please re-wild some parts of the city that flood every time we get heavy rainfall."	FS2037.736	Reject
868.3	Maureen Kerr	Address existing issues of traffic congestion, carparking, flooding, liquefaction		Reject

875.2	Philippa Rutledge	In [the Medium Density Residential Zone] qualifying matters – include stormwater infrastructure that has not been upgraded within the last 20 years. The plan change is subject to Part 2 in the usual way, and as such the health and well-being of people in s5 should not be diminished as a result of stormwater discharges.	FS2082.801	Reject
876.22	Alan Ogle	Further densification in areas where flooding is frequent and serious (and there is no immediate plan to mitigate) should be prevented by making those areas a qualifying matter.		Reject
876.24	Alan Ogle	Oppose intensification of development.		Reject
908.4	Ross Gray for Christchurch Civic Trust on behalf of Christchurch Civic Trust	[Seeks that council take] a water sensitive design (sponge city) approach for catchment-wide flood risk management.	FS2037.673	Reject
1086.1	Christian Jordan	Oppose intensification proposed by PC14		Reject

Natural Hazards QMs – Issue 4 – Site and area specific changes related to flooding				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
11.8	Cheryl Horrell	Identify Bluebell Lane and other land that has sunk as a “Qualifying Matter” due to it being a “...High Flood Hazard Management Area [and] Flood Ponding Management Area...”.		Reject
73.1	Helen Spear	" Decision sought: Not stated. Decision reason: Not stated, although flood management area map appended to submission. "		Reject
94.1	Rebecca Perkins	Remove the areas close to Papanui Road from the High-density Residential zone, especially those that are prone to flooding and do not have nearby stormwater systems that cope with heavy rain.	FS2037.168	Reject
246.1 + 246.2	Robert Black	Include the Flood Management Area, or at least that part of the FMA in the Merivale catchment, as a Qualifying Matter to exclude MDRS rules from applying.	FS2082.206, FS2082.207	Reject
329.1	Dominic Mahoney	Remove High-density Residential Zoning from Perry Street [Merivale]		Reject
583.3 + 583.6 + 583.7	Jaimita de Jongh	Seek that increased density is not allowed in areas that drain into the mid-Heathcote Ōpāwaho		Reject
653.10	David McLauchlan	Make Flooding on Palmside Street a Qualifying Matter for exemption from development.		Reject
668.1 + 668.2	Keri Murison	Amend the zoning of Strowan from HRZ to MRZ		Reject
668.4	Keri Murison	Strowan, particularly those blocks in the vicinity of St Andrews College, should be subject to a qualifying matter.		Reject
680.2 + 680.3	Bernard and Janette Johnston and Dovey	Consider the existing infrastructure issues on the Hills and amend PC14 to include a new Infrastructure Qualifying Matter area on the Hills as appropriate, and make all consequential amendments necessary to give effect to this submission.		Reject

692.1	David Murison	Seeks that Council identify the area of Strowan, particularly those blocks in the vicinity of St Andrews College, as worthy of definition as an area which warrants zoning as Medium Density Residential Zone not High-density Residential Zone. Seek that this change be made by way of 'Area limited by Qualifying Matters' or other appropriate means	FS2082.434	Reject
692.3	David Murison	[Regarding 14.6.2] concerns in relation to the impact of the proposed changes on the stormwater and wastewater networks in our local community of Strowan	FS2082.436	Reject
692.9 + 692.10	David Murison	[I]dentify the area of Strowan, particularly those blocks in the vicinity of St Andrews College, as worthy of definition as an area which warrants zoning as MRZ not HRZ as proposed in PC14, as the impact on infrastructure demand and amenity values under HRZ is significantly greater than under MRZ.	FS2082.442, FS2082.443	Reject
693.3	Henri Murison	[Regarding 14.6.2] concerns in relation to the impact of the proposed changes on the stormwater and wastewater networks in our local community of Strowan	FS2082.446	Reject
693.9	Henri Murison	[U]rge Council to identify the area of Strowan, particularly those blocks in the vicinity of St Andrews College, as worthy of definition as an area which warrants zoning as MRZ not HRZ as proposed in PC14, as the impact on infrastructure demand and amenity values under HRZ is significantly greater than under MRZ.	FS2082.452	Reject
693.10	Henri Murison	Seeks that Council identify the area of Strowan, particularly those blocks in the vicinity of St Andrews College, as worthy of definition as an area which warrants zoning as Medium Density Residential Zone not High-density Residential Zone. Seek that this change be made by way of 'Area limited by Qualifying Matters' or other appropriate means	FS2082.453	Reject

794.2 + 794.3 + 794.8	Greg Partridge	The submitter requests that the area of South Richmond be made exempt from housing intensification via a qualifying matter due to natural hazard risks, in particular risk from future earthquakes and flooding.	FS2037.725, FS2037.726, FS2070.2, FS2083.2, FS2037.731, FS2070.4	Reject
901.15	John Hudson	Change Watford St from HRZ to MRZ		Reject

Natural Hazards QMs – Issue 5 – Removal of flooding overlay				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
443.12	Summerset Group Holdings Limited	Remove the natural hazards and waterbodies qualifying matters from the Summerset Cavendish site.		Reject
834.20 – 834.24	Kāinga Ora – Homes and Communities	<p>6.1 A Qualifying matters</p> <ol style="list-style-type: none"> 1. Amend the provisions to remove /delete the mapped Hazard Management Areas from within the District Plan and instead hold this information in non-statutory GIS maps. 2. Reduce the Tsunami Management Area to a 1:100 year hazard. 3. Amend and make consequential changes to give effect to this submission. 	FS2044.18, FS2045.16, FS2045.89, FS2049.9, FS2075.7	Reject
877.4	Otautahi Community Housing Trust	Amend the provisions to remove / delete the mapped Hazard Management Areas from within the District Plan. Instead, these natural hazard overlays should be based on non-statutory map layers in the City Council's Interactive Viewer that sits outside the District Plan. Not included in the Proposed Plan and Variation.	FS2082.1232, FS2082.1300	Reject

Natural Hazards QMs – Issue 6 – Include controls for areas susceptible to (non-coastal) erosion				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
154.1 + 154.2	Ōpāwaho Heathcote River Network (OHRN)	Amend by adding a Qualifying Matter, namely High Soil Erosion Risk area as indicated in the Land and Water Regional Plan.	FS2037.220, FS2037.221, FS2082.77, FS2082.78	Reject
689.75	Environment Canterbury / Canterbury Regional Council	[That the Slope Instability Management Area Rules] take into account Trangmar’s erosion classes and exclude “severe” erosion class land from further subdivision and development.	FS2037.1097, FS2075.18, FS2082.426	Reject
689.76 + 689.77	Environment Canterbury / Canterbury Regional Council	<p>[Seeks new Qualifying Matters for]:</p> <ul style="list-style-type: none"> Slope Instability Management Areas - take into account Trangmar’s erosion classes and exclude “severe” erosion class land from further subdivision and development. <p>the upper Halswell River catchment areas are covered by a Qualifying Matter that prevents further intensification because of inadequate stormwater infrastructure and downstream flooding effects.</p>	FS2037.1098, FS2037.1099, FS2066.8, FS2075.19, FS2082.427, FS2066.9, FS2075.20, FS2082.428	Reject

Natural Hazards QMs – Issue 7 – Include controls for liquefaction and earthquake risk				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
54.2 + 54.8	Shirley van Essen	[S]eek[s] that TC3 land (high liquification risk) should remain residential suburban.	FS2070.5, FS2070.6, FS2037.87	Reject
246.4	Robert Black	List TC3 land as a Qualifying Matter. As a default, that land should not be intensively developed. It is appropriate to obtain resource consent to[o]	FS2082.209	Reject
255.5 + 255.6	William Bennett	Introduce a TC3 land QM.	FS2082.212, FS2082.213	Reject
440.5	Sandi Singh	Neutral - seeks that the Technical Category 3 and 2 land is considered.		Reject
707.2	Isobel Foyle	" [T]o rezone the area from High-density and commission a study of how suitable the land in Christchurch actually is for housing higher than two stories, especially as the Alpine Fault is now due for rupture."		Reject
763.1	Christina Stachurski	the Council must insist on getting Geotechnical Investigation Reports for all of the suburbs affected before the new 'law' can take effect here. And get those investigations done by 'independent' engineers.		Reject
778.1	Mary O'Connor	Consider making the earthquake damage risk to dwellings a Qualifying Matter. I'm not convinced that NZ can build multi-storey dwellings to withstand a rupture of the Alpine Fault and aftershocks that is likely to occur within the next 50 years (it's already overdue).	FS2083.1	Reject
778.2 + 778.3	Mary O'Connor	Consider making the earthquake damage risk to dwellings a Qualifying Matter.	FS2083.2	Reject

779.1	Glenda Duffell	Decision sought: [Oppose intensification in areas with liquefaction risk] Decision reason: Chapter 5 Natural Hazards: Allowing medium density housing in areas with a TC3 earthquake category is simply wrong. In the Redwood area where there was significant damage to housing due to underground streams and liquefaction, the extra housing medium density would bring to the area would put further pressure on the land and infrastructure of the area. There is a need to prevent existing houses from damage during the building processes of earthworks required for the foundations of such builds. I object to medium density housing in TC3 and TC2 category land.		Reject
794.2 + 794.3 + 794.8	Greg Partridge	The submitter requests that the area of South Richmond be made exempt from housing intensification via a qualifying matter due to natural hazard risks, in particular risk from future earthquakes and flooding.	FS2037.725, FS2037.726, FS2037.731, FS2070.2, FS2083.2, FS2070.4	Reject
867.1	Robina Dobbie	[Seeks to] add in a qualifying matter in the CBD and other vulnerable areas of land for managing earthquake natural hazards.		Reject
868.3	Maureen Kerr	Address existing issues of traffic congestion, carparking, flooding, liquefaction		Reject
898.2	Denis McMurtrie	"[That] the area to the South and East of Harewood Road and Main North Road [around Paparoa Street / Strowan] is zoned Residential Suburban. "		Reject

902.3 + 902.4	Waipuna Halswell-Hornby-Riccarton Community Board	<p>[Suggested new Qualifying Matter]: [That Council consider whether] the effects of the major earthquake sequence suffered by Christchurch in 2010-11 should be regarded a qualifying matter for the whole city.</p> <p>In the event that earthquake susceptibility of the whole city is not accepted as a qualifying matter, the Board considers that at least the most susceptible TC3 land should be a qualifying matter</p>	FS2063.181, FS2064.175, FS2082.1265, FS2037.680, FS2063.182, FS2064.176, FS2082.1266	Reject
902.5	Waipuna Halswell-Hornby-Riccarton Community Board	<p>[That technical assessments are undertaken on]:</p> <ul style="list-style-type: none"> • social impacts • infrastructure capacity <p>citywide geotechnical stability</p>	FS2082.1267	Reject
902.7	Waipuna Halswell-Hornby-Riccarton Community Board	<p>[That the threshold for qualifying matters be lowered to enable] recognition of a range of other matters that render areas of the city unsuitable for the type of intensification proposed. These matters include land stability and the height of the water table in some areas, as well as the capacity of infrastructure such as roading to cope with additional development.</p>	FS2082.1269	Reject
1086.1	Christian Jordan	Oppose intensification proposed by PC14		Reject

Natural Hazards QMs – Issue 8 – Include overlay for rockfall protection structures within slope instability areas				
Sub. No.	Submitter name	Summary of relief sought	Further submissions	Recommendation
231.1	Phil Elmey	Adopt the Building Code guidance document for design of passive protection structures as an acceptable method of reducing rockfall hazard on a site-specific basis.		Reject
240.1	Ruth Dyson	[re: Rule 5.6.1.2] All homes in the Port Hills which have had rockfall protection structures erected. There should be an additional overlay in the District Plan identifying that even though these homes are in a rockfall risk area, that these specific homes have rockfall protection structures in place.		Reject
368.1	Karen Theobald	[Seeks] removal of Point 7, Clause 5.6.1.2 of the District Plan...An alternative solution is to apply a new overlay accounting for a property or part of, that falls within a natural hazard area BUT its rockfall risk (for that particular dwelling) has been mitigated.		Reject

Natural Hazards QMs – Submissions in support			
Sub. No.	Submitter name	Summary of relief sought	Further submissions
205.4 + 205.5	Addington Neighbourhood Association	That natural hazards must be allowed for, or the Council could face legal redress for allowing higher density in the wrong places.	FS2037.296, FS2082.124, FS2082.125
377.6	Toka Tū Ake EQC	Support the inclusion of flood, coastal, tsunami and slope hazard management areas as Qualifying Matters to reduce the level of enablement of the MDRS and NPS-UD.	
377.7	Toka Tū Ake EQC	Support 8.5.1.2 hazard constraints being included as matters of control of subdivision to create allotments within the Medium and High-density Residential Zones.	
689.73	Environment Canterbury / Canterbury Regional Council	[Retain the following Qualifying Matters as notified]: <ul style="list-style-type: none"> Heritage areas, items and their settings, residential heritage areas Flood Hazard Management Areas ... 	FS2012.3, FS2012.6, FS2037.1095, FS2056.22, FS2075.16, FS2082.433
804.2	Waihoru Spreydon-Cashmere-Heathcote Community Board	[S]upports the qualifying matters in the proposal and in particular the following are of local interest in Waihoru Spreydon-Cashmere-Heathcote: Matters of national importance (RMA s6) – ... slope hazard areas...	
804.8	Waihoru Spreydon-Cashmere-Heathcote Community Board	[S]upports the need to include high-risk natural hazards as Qualifying Matters. Coastal inundation, coastal erosion and tsunami hazards are all of concern to at least some of the community in Waihoru Spreydon-Cashmere-Heathcote.	
834.18 + 834.19	Kāinga Ora – Homes and Communities	6.1A qualifying matters Table 1 Retain the Slope Hazard Areas qualifying matter.	FS2055.9, FS2075.5, FS2075.6
881.22	Red Spur Ltd	[Regarding 5.6.1.1(P21)] Supports Redmund Spur Neighbourhood Centre subject to retention of Rule 5.6.1.1. P21 and for clarity change reference in a. from 'local centres' to 'neighbourhood centres'	

900.2	Summit Road Society	<p>We support the following items as qualifying matters: • Matters of national importance including sites of cultural, heritage and ecological importance, areas of high-risk natural hazards and significant trees.</p> <ul style="list-style-type: none"> • Public open space areas. 	FS2037.682, FS2082.825
1009.4	Richard Abey-Nesbit	The submitter supports limitation of heritage areas in respect of identified natural hazards.	

APPENDIX B – PC14 - DISTRICT PLAN TEXT AMENDMENTS WITH RECOMMENDED CHANGES

As a result of consideration of submissions, some amendments to the District Plan provisions are recommended. For the purposes of these amendments, the District Plan text is shown as **bold** text. Amendments proposed by the Plan Change as notified are shown as **bold underlined** or ~~**bold strikethrough**~~ text.

Any text recommended to be added, following consideration of submissions, is shown as **bold underlined text in red** and that to be deleted as ~~**bold strikethrough in red**~~.

Text in **green** font identifies existing terms defined in Chapter 2 – Definitions. Text in **blue and underlined** shows links to other provisions in the e-plan or to external documents. These have pop-ups and hyperlinks, respectively, in the on-line Christchurch District Plan. Where a term is defined in the newly added bold text, it will show as **green underlined** text in bold.

Tree protection zone radius

means the protection area around a scheduled tree, which is equivalent to 15 times the trunk diameter at 1.4m ~~above ground level~~, where activities and development are managed to prevent damage to a scheduled tree. The maximum extent of a tree protection zone radius is restricted to 15m.

Recommended change to RD6 should the Riccarton Bush QM and the expanded Air Noise Control QM not be retained:

9.4.4.1.3 Restricted discretionary activities

Activity		The Council's discretion shall be limited to the following matters:
RD6	<p>a. Any of the following within 10 metres <u>tree protection zone radius</u> of the base of any tree in the Significant Trees area at Riccarton Bush:</p> <ul style="list-style-type: none"> i. works (including earthworks, other than as provided for by Rule 9.4.4.1.1 P12); ii. vehicular traffic; iii. sealing or paving (excluding earthworks); iv. storage of materials, vehicles, plant or equipment; <p>or</p> <ul style="list-style-type: none"> v. the release, injection or placement of chemicals 	a. Rule 9.4.6 a. – o.

	<p>or toxic substances.</p> <p>b. In the case of the property at 48 Rata Street (legally described as Lot 375 DP 11261) the 10 metre restriction shall only apply to the northern boundary of that property.</p> <p>c. For the purposes of this rule, the outer boundary defining the Significant Trees Area (which follows the predator-proof fence surrounding the forest remnant) shall be deemed to be the base of the tree.</p> <p>d. c. Any application arising from this rule shall not be limited or publicly notified.</p>	
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Recommended change to RD6 should the Riccarton Bush QM and the expanded Air Noise Control QM be retained (i.e. retain the operative version of RD6):

9.4.4.1.3 Restricted discretionary activities

Activity		The Council's discretion shall be limited to the following matters:
RD6	<p>a. Any of the following within 10 metres of the base of any tree in the Significant Trees area at Riccarton Bush:</p> <ul style="list-style-type: none"> i. works (including earthworks, other than as provided for by Rule 9.4.4.1.1 P12); ii. vehicular traffic; iii. sealing or paving (excluding earthworks); iv. storage of materials, vehicles, plant or equipment; <p>or</p> <ul style="list-style-type: none"> v. the release, injection or placement of chemicals or toxic substances. <p>b. In the case of the property at 48 Rata Street (legally described as Lot 375 DP 11261) the 10 metre</p>	<p>a. Rule 9.4.6 a. – o.</p>

	<p>restriction shall only apply to the northern boundary of that property.</p> <p>c. For the purposes of this rule, the outer boundary defining the Significant Trees Area (which follows the predator-proof fence surrounding the forest remnant) shall be deemed to be the base of the tree.</p> <p>dc. Any application arising from this rule shall not be limited or publicly notified.</p>	
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9.4.6 Rules – Matters of discretion

Effects of activity/works on the tree(s)

c. Whether the works will be undertaken in a manner consistent with internationally accepted arboricultural standards, practices and procedures, and relating to qualifying matter trees, whether the scale or nature of the works warrants the involvement of a Technician arborist;

Appendix 9.4.7.1 Schedules of significant trees (Christchurch City and Banks Peninsula)

Street number	Street address	Tree ID	Planning Map Number	GPS Easting Co-ordinate	GPS Northing Co-ordinate	Name		Exceptional Values	Qualifying Matter
32	Armagh Street	T13	32C, H15	2480089.143	5741995.833	Acer pseudoplatanus	Variegated Sycamore		No-Yes = <u>Section 7</u>

14.2.12.1 Policy – Managing effects on industrial activities

a. Restrict new residential development of three or more storeys within proximity to industrial zoned sites where it would give rise to reverse sensitivity effects on industrial activities and/or significantly

adversely affect the amenity, health and safety of residents, unless mitigation sufficiently addresses the effects.

Residential Suburban and Residential Suburban Density Transition Zone

14.4.2.3 Building height

a. The maximum height of any building shall be:

	Activity / area	Standard
v.	Any building for a residential activity within the Industrial Interface Qualifying Matter Area	7 metres or 2 storeys, whichever is the lesser

Medium Density Residential Zone

14.5.2.3 Building height

a. The maximum height of any building shall be:

	Activity / area	Standard
iv.	<u>Any building for a residential activity within the Industrial Interface Qualifying Matter Area</u>	<u>7.8 metres or 2 storeys, whichever is the lesser</u>

High Density Residential Zone

14.6.2.1 Building height

c. Buildings for a residential activity within the Industrial Interface Qualifying Matter Area must not exceed 7.8 metres in height above ground level or two storey, whichever is the lesser.

APPENDIX C - HIGHER ORDER DOCUMENTS RELEVANT TO THE INDUSTRIAL INTERFACE QM, THE SIGNIFICANT AND OTHER TREES QM, AND THE NATURAL HAZARDS QMS

Document	Relevant provisions	Relevant direction given effect to
NPS-UD	Objective 1	New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.
	Objective 2	Planning decisions improve housing affordability by supporting competitive land and development markets
	Objective 8	New Zealand’s urban environments: a. support reductions in greenhouse gas emissions; and b. are resilient to the current and future effects of climate change
	Policy 1	Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum: (a) have or enable a variety of homes that: (i) meet the needs, in terms of type, price, and location, of different households; and (ii) enable Māori to express their cultural traditions and norms; and (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and (e) support reductions in greenhouse gas emissions; and (f) are resilient to the likely current and future effects of climate change.

	Policy 6	<p>When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:</p> <p>(a) the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement</p> <p>(b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:</p> <p>(i) may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and</p> <p>(ii) are not, of themselves, an adverse effect</p> <p>(c) the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)</p> <p>(d) any relevant contribution that will be made to meeting the requirements of this National Policy Statement to provide or realise development capacity</p> <p>(e) the likely current and future effects of climate change</p>
New Zealand Coastal Policy Statement (NZCPS) ¹⁸	Objective 5	<p>To ensure that coastal hazard risks taking account of climate change, are managed by:</p> <ul style="list-style-type: none"> • locating new development away from areas prone to such risks; • considering responses, including managed retreat, for existing development in this situation; and • protecting or restoring natural defences to coastal hazards
	Policy 24 Identification of coastal hazards	<p>(1) Identify areas in the coastal environment that are potentially affected by coastal hazards (including tsunami), giving priority to the identification of areas at high risk of being</p>

¹⁸ Guidance from the Department of Conservation contained in <https://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/guidance/policy-24-to-27.pdf>

		<p>affected. Hazard risks, over at least 100 years, are to be assessed having regard to:</p> <ul style="list-style-type: none"> (a) physical drivers and processes that cause coastal change including sea level rise; (b) short-term and long-term natural dynamic fluctuations of erosion and accretion; (c) geomorphological character; (d) the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent; (e) cumulative effects of sea level rise, storm surge and wave height under storm conditions; (f) influences that humans have had or are having on the coast; (g) the extent and permanence of built development; and (h) the effects of climate change on: <ul style="list-style-type: none"> (i) matters (a) to (g) above; (ii) storm frequency, intensity and surges; and (iii) coastal sediment dynamics; <p>taking into account national guidance and the best available information on the likely effects of climate change on the region or district.</p>
	<p>Policy 25 Subdivision, use, and development in areas of coastal hazard risk</p>	<p>In areas potentially affected by coastal hazards over at least the next 100 years:</p> <ul style="list-style-type: none"> (a) avoid increasing the risk¹⁰ of social, environmental and economic harm from coastal hazards; (b) avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards; (c) encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;

		<p>(d) encourage the location of infrastructure away from areas of hazard risk where practicable;</p> <p>(e) discourage hard protection structures and promote the use of alternatives to them, including natural defences; and</p> <p>(f) consider the potential effects of tsunamis and how to avoid or mitigate them.</p> <p>10 Risk: as defined in the Glossary: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence (AS/NZS ISO 31000:2009 Risk management – Principles and guidelines, November 2009).</p>
<p>Canterbury Regional Policy Statement (CRPS)</p>	<p>Objective 6.2.1 Recovery framework</p>	<p>Recovery, rebuilding and development are enabled within Greater Christchurch through a land use and infrastructure framework that:</p> <ol style="list-style-type: none"> 1. identifies priority areas for urban development within Greater Christchurch; 2. identifies Key Activity Centres which provide a focus for high quality, and, where appropriate, mixed-use development that incorporates the principles of good urban design; 3. avoids urban development outside of existing urban areas or greenfield priority areas for development, unless expressly provided for in the CRPS; 4. protects outstanding natural features and landscapes including those within the Port Hills from inappropriate subdivision, use and development; 5. protects and enhances indigenous biodiversity and public space; 6. maintains or improves the quantity and quality of water in groundwater aquifers and surface waterbodies, and quality of ambient air; 7. maintains the character and amenity of rural areas and settlements; 8. protects people from unacceptable risk from natural hazards and the effects of sea-level rise; 9. integrates strategic and other infrastructure and services with land use development;

		<p>10. achieves development that does not adversely affect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs;</p> <p>11. optimises use of existing infrastructure; and</p> <p>12. provides for development opportunities on Māori Reserves in Greater Christchurch.</p>
Objective Business land development	6.2.6	<p>Identify and provide for Greater Christchurch's land requirements for the recovery and growth of business activities in a manner that supports the settlement pattern brought about by Objective 6.2.2, recognising that:</p> <ol style="list-style-type: none"> 1. The greenfield priority areas for business in Christchurch City provide primarily for the accommodation of new industrial activities; 2. Except where identified for brownfield redevelopment, areas used for existing industrial activities are to be used primarily for that purpose, rather than as a location for new commercial activities; 3. New commercial activities are primarily directed to the Central City, Key Activity Centres, and neighbourhood centres; 4. A range of other business activities are provided for in appropriate locations; and 5. Business development adopts appropriate urban design qualities in order to retain business, attract investment and provide for healthy working environments.
Policy Business land	6.3.6	<p>To ensure that provision, recovery and rebuilding of business land in Greater Christchurch maximises business retention, attracts investment, and provides for healthy working environments, business activities are to be provided for in a manner which:</p> <ol style="list-style-type: none"> 1. Promotes the utilisation and redevelopment of existing business land, and provides sufficient additional greenfield priority area land for business land through to 2028 as provided for in Map A;

		<p>2. Recognises demand arising from the relocation of business activities as a result of earthquake[1]damaged land and buildings;</p> <p>3. Reinforces the role of the Central City, as the city's primary commercial centre, and that of the Key Activity Centres;</p> <p>4. Recognises that new commercial activities are primarily to be directed to the Central City, Key Activity Centres and neighbourhood centres where these activities reflect and support the function and role of those centres; or in circumstances where locating out of centre, will not give rise to significant adverse distributional or urban form effects;</p> <p>5. Recognises that new greenfield priority areas for business in Christchurch City are primarily for industrial activities, and that commercial use in these areas is restricted;</p> <p>6. Recognises that existing business zones provide for a range of business activities depending on:</p> <ul style="list-style-type: none">i. the desired amenity of the business areas and their surrounds; andii. the potential for significant distributional or urban form effects on other centres from new commercial activity. <p>7. Utilises existing infrastructure availability, capacity and quality;</p> <p>8. Ensures reverse sensitivity effects and conflicts between incompatible activities are identified and avoided or mitigated against;</p> <p>9. Ensures close proximity to labour supply, major transport hubs and passenger transport networks;</p> <p>10. Encourages self-sufficiency of employment and business activities within communities across Greater Christchurch;</p> <p>11. Promotes, where appropriate, development of mixed-use opportunities, within Key Activity Centres provided reverse sensitivity issues can be appropriately managed; and</p> <p>12. Incorporates good urban design principles appropriate to the context of the development</p>
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	<p>Objective 11.2.1 Avoid new subdivision, use and development of land that increases risks associated with natural hazards</p>	<p>New subdivision, use and development of land which increases the risk of natural hazards to people, property and infrastructure is avoided or, where avoidance is not possible, mitigation measures minimise such risks.</p>
	<p>Objective 11.2.2 Adverse effects from hazard mitigation are avoided or mitigated</p>	<p>Adverse effects on people, property, infrastructure and the environment resulting from methods used to manage natural hazards are avoided or, where avoidance is not possible, mitigated.</p>
	<p>Objective 11.2.3 Climate change and natural hazards</p>	<p>The effects of climate change, and its influence on sea levels and the frequency and severity of natural hazards, are recognised and provided for.</p>
	<p>Policy 11.3.1 Avoidance of inappropriate development in high hazard areas</p>	<p>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:</p> <ol style="list-style-type: none"> 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 5. Outside of greater Christchurch, is proposed to be located in an area zoned or identified in a district plan for urban residential, industrial or commercial use, at the date of notification of the CRPS, in which case the effects of the natural hazard must be mitigated; or

		<p>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</p> <p>7. Within greater Christchurch, relates to the maintenance and/or upgrading of existing critical or significance infrastructure.</p>
	<p>Policy 11.3.2 Avoid development in areas subject to inundation</p>	<p>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:</p> <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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). <p>When determining areas subject to inundation, climate change projections including sea level rise are to be taken into account.</p>
	<p>Policy 11.3.3 Earthquake hazards</p>	<p>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.</p>
	<p>Policy 11.3.5 General risk</p>	<p>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</p>

	management approach	<p>land shall be avoided if the risk from natural hazards is unacceptable. When determining whether risk is unacceptable, the following matters will be considered:</p> <ol style="list-style-type: none"> 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. <p>Where there is uncertainty in the likelihood or consequences of a natural hazard event, the local authority shall adopt a precautionary approach.</p> <p>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).</p>
	Policy 11.3.7 Physical mitigation works	<p>New physical works to mitigate natural hazards will be acceptable only where:</p> <ol style="list-style-type: none"> 1. the natural hazard risk cannot reasonably be avoided; and 2. any adverse effects of those works on the natural and built environment and on the cultural values of Ngāi Tahu, are avoided, remedied or mitigated. <p>Alternatives to physical works, such as the relocation, removal or abandonment of existing structures should be considered.</p> <p>Where physical mitigation works or structures are developed or maintained by local authorities, impediments to accessing those structures for maintenance purposes will be avoided.</p>
	Objective 13.2.1 Identification and protection of significant historic heritage	<p>Identification and protection of significant historic heritage items, places and areas, and their particular values that contribute to Canterbury's distinctive character and sense of identity from inappropriate subdivision, use and development.</p>

APPENDIX D - RELEVANT QM OBJECTIVES AND POLICIES IN THE PLAN

9.4.2.1.1 Objective — Trees

- a. Maintain and enhance the contribution of the Christchurch District's significant trees listed in Appendix 9.4.7.1, and trees in road corridors, parks, reserves and public open space, to community amenity through:
- i. landscape character and amenity;
 - ii. heritage and cultural values;
 - iii. purification of air and rainwater;
 - iv. releasing oxygen and storing carbon;
 - v. cooling of the built environment and waterways;
 - vi. stormwater and erosion management; and
 - vii. biodiversity protection and enhancement;
- while providing for the reasonable use and enjoyment of property and landowner responsibilities.

9.4.2.2.3 Policy – Tree protection

- a. Protect from inappropriate physical works:
- i. trees that are listed in Appendix 9.4.7.1, particularly those trees identified as having exceptional values **and those trees identified as qualifying matters**; and
 - ii. trees in road corridors, parks, reserves and public open space where they provide amenity value and/or collectively contribute to the character and environmental quality of the Christchurch District, to the extent consistent with maintaining the multiple functions of road corridors, parks, reserves and public open space.

9.4.2.2.4 Policy – Tree maintenance

- a. To enable the maintenance and management of trees that are listed in Appendix 9.4.7.1 and trees in road corridors, parks, public open space and reserves in recognition that such works may be necessary to:
- i. ensure the continuing health, structural integrity and amenity value of the trees;
 - ii. enable the reasonable use and enjoyment of the property and surrounds; and
 - iii. minimise the risk from the trees to public safety, property, buildings, strategic infrastructure and electricity distribution lines.

9.4.2.2.5 Policy – Trees and utilities

- a. Where it would not be reasonable to locate outside of the [drip line tree protection zone radius](#) of a significant tree listed in [Appendix 9.4.7.1](#) due to locational, technical or operational requirements, ensure that the [utility](#) is appropriately designed, located and installed to maintain as far as practicable the specific values of the tree.

9.4.2.2.6 Policy– Trees in road corridors, parks, reserves and public open space

- a. [Road](#) corridors, parks, [reserves](#), and [public open space](#) are planted with trees to enhance environmental, landscape, cultural, social and economic values.
- b. Identify significant trees, including groups of trees, in [road](#) corridors, parks, [reserves](#), and [public open space](#) and list them in [Appendix 9.4.7.2](#).

9.4.2.2.7 Policy - Felling of trees

- a. For trees listed in [Appendix 9.4.7.1](#):
 - i. limit the felling of significant trees, except where there are no reasonable alternatives enabling retention of the tree due to its condition, or where the use and enjoyment of a property and surrounds is significantly compromised or diminished; and
 - ii. avoid the felling of significant trees that are identified as having exceptional values, except where there are no reasonable alternatives, or where the use and enjoyment of a property and surrounds is significantly compromised or diminished.
- b. Limit the felling of trees in [road](#) corridors, parks, [public open space](#) and [reserves](#) having regard to size, location and species, except where there are no reasonable alternatives.

3.3.6 Objective - Natural hazards

- a. New **subdivision**, use and development (other than new **critical infrastructure** or **strategic infrastructure** to which paragraph b. applies):
 - i. is to be avoided in areas where the risks from natural hazards to people, property and infrastructure are assessed as being unacceptable; and
 - ii. in all other areas, is undertaken in a manner that ensures the risks of natural hazards to people, property and infrastructure are appropriately mitigated.
- b. New **critical infrastructure** or **strategic infrastructure** may be located in areas where the risks of natural hazards to people, property and infrastructure are otherwise assessed as being unacceptable, but only where:
 - i. there is no reasonable alternative; and
 - ii. the **strategic infrastructure** or **critical infrastructure** has been designed to maintain, as far as practicable, its integrity and form during natural hazard events; and
 - iii. the natural hazard risks to people, property and infrastructure are appropriately mitigated.
- c. There is increased public awareness of the range and scale of natural hazard events that can affect **Christchurch District**.
- d. The repair of earthquake damaged land is facilitated as part of the recovery.

5.2.2.1.1 Policy — Avoid new development where there is unacceptable risk

- a. Avoid new **subdivision**, use and development, including new urban zonings, where the risk from a natural hazard is assessed as being unacceptable.

5.2.2.1.2 Policy — Manage activities to address natural hazard risks

- a. Manage activities in all areas subject to natural hazards in a manner that is commensurate with the likelihood and consequences of a natural hazard event on life and property.

5.2.2.2.1 Policy — Flooding

- a. Map hazard risk for the **Flood Management Area** based on:
 - a modelled 0.5% **AEP** (1 in 200-year) rainfall event plus a 5% **AEP** (1 in 20-year) tide event plus 250mm **freeboard**; OR a modelled 5% **AEP** (1 in 20-year flood event) plus a 0.5% **AEP** (1 in 200-year) tide event plus 250mm **freeboard**; OR 11.9m above **Christchurch City Council Datum** (the maximum 200-year tidal contour) plus 250mm **freeboard**; whichever is the greater; and
 - allowance for 1 metre of sea level rise and an increase in rainfall intensity by 16% through to 2115 as a result of climate change; and
 - a maximum buffer extension of the modelled rainfall event areas by 60 metres in a north/south and east/west direction.
- b. In the **High Flood Hazard Management Area**:
 - provide for development of a residential unit on residentially zoned land where the flooding risk is predominantly influenced by sea-level rise and where appropriate mitigation can be provided that protects people's safety, well-being and property from unacceptable risk; and
 - within the **Specific Purpose (Ōtākaro Avon River Corridor) Zone**, provide for structures in accordance with **Policy 13.14.2.1.8**.
 - In all other cases, avoid **subdivision**, use or development where it will increase the potential risk to people's safety, well-being and property.
- c. Avoid activities locating where they could undermine the integrity of the Waimakariri River primary stopbank system, and restrict activities locating where they could undermine the integrity of the Waimakariri River secondary stopbank system.
- d. Maintain the flood storage capacity and function of natural floodplains, **wetlands** and ponding areas, including the Hendersons Basin, Cashmere Stream Floodplain, Hoon Hay Valley, Cashmere-Worsleys Ponding Area, Cranford Basin and Lower Styx Ponding Area¹.
- 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.
- f. Reduce potential flood damage by ensuring floor levels for new **buildings** or additions to **buildings**, except those unlikely to suffer material damage, are above flooding predicted to occur in a **major flood event**, including an allowance for appropriate **freeboard**.

5.2.2.4.1 Policy — Slope instability

- a. Map areas of slope instability risk at an area-wide scale using the following fixed inputs into calculations² that establish the **Annual Individual Fatality Risk (AIFR)** for a typical residential site³:

	Slope instability hazard management area	Inputs			Mapped risk (AIFR)
		Percentage of a day the property is assumed to be occupied (%)	Year of predicted seismic activity used in modelling	Whether or not the property is evacuated immediately following a Natural Hazard Event	
i.	Cliff Collapse Management Area 1	100	2012	No	$\geq 10^{-2}$
ii.	Cliff Collapse Management Area 2	100	2012	No	$\geq 10^{-4}$
iii.	Rockfall Management Area 1	67	2016	Yes	$\geq 10^{-4}$
iv.	Rockfall Management Area 2	100	2016	No	$\geq 10^{-4}$
v.	Mass Movement Management Area 1	67	2016	Yes	$\geq 10^{-4}$
vi.	Mass Movement Management Areas 2 & 3	Refer to natural hazard maps			

- b. In slope instability hazard management areas in the Port Hills and across **Banks Peninsula**:
avoid **subdivision**, use and development where the activity will result in an unacceptable risk to life safety (**AIFR** $\geq 10^{-4}$ using the GNS Science method and parameters for establishing life safety

5.2.2.4.2 Policy — Site-specific risk assessment for AIFR Certificates⁴ in certain areas potentially affected by rockfall and/or cliff collapse

- a. Provide for site-specific assessment of risk from rockfall and/or cliff collapse, in Rockfall Management Area 1, Rockfall Management Area 2, and/or Cliff Collapse Management Area 2, in accordance with the method and parameters described in **Policy 5.2.2.4.1a**⁵ (along with all relevant site-specific information) in order to allow for the issue of **AIFR** certificates.
- b. Make information from site-specific assessments of risk from rockfall and/or cliff collapse (which have been certified by the **Council**) readily publicly available.
- c. Regularly notify changes to the **District Plan**, as required to change the planning maps, in order to reflect updated information from site-specific assessments of life-safety risk from rockfall and/or cliff collapse which have been certified by the **Council**.