BEFORE THE INDEPENDENT HEARING COMMISSIONERS IN CHRISTCHURCH

TE MAHERE Ā-ROHE I TŪTOHUA MŌ TE TĀONE O ŌTAUTAHI

IN THE MATTER OF	Resource Management Act 1991
AND	
IN THE MATTER	of the hearing of submissions on Plan Change 14 (Housing and Business Choice) to the Christchurch District Plan

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JOINT WITNESS CONFERENCING STATEMENT OF PLANNERS ON RADIOCOMMUNICATION PATHWAY PROTECTION CORRIDORS

14 November 2023

INTRODUCTION

1. This memorandum records the minutes of discussions between the planners on the topic of **the Radiocommunication Pathway Protection Corridors.**

2. A meeting was held on **Tuesday 14 November 2023** and correspondence has been held between 3 – 16 November 2023 regarding the tracked provisions appended to this statement.

3. Attendees at the meeting and parties to the correspondence were:

   (a) **Holly Gardiner,** for Christchurch City Council. Holly Gardiner is the author of **the s42A report on Central City provisions**, and rebuttal relating to the radiocommunication pathways dated 9 October.

   (b) **Fiona Small,** for the Ministry of Justice #910, Fire and Emergency NZ #842, NZ Police #2005, Hato Hone St John #909, Canterbury Civil Defence and Emergency Management Group #912; is the author of the original submissions and planning submitter evidence filed with the Independent Hearings Panel dated 19th September 2023.

CODE OF CONDUCT

4. We confirm that we have read the Environment Court Practice Note 2023 and agree to abide by it.

PURPOSE AND SCOPE OF CONFERENCING

5. The purpose of the discussions were to identify, discuss, and highlight points of agreement and disagreement on issues relevant to Plan Change 14 provisions for the Radiocommunication Pathway Protection Corridors.

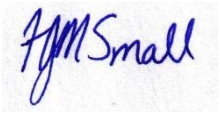
6. All attendees reviewed the s42A report and evidence described above in advance of the meeting.

7. **Annexure A** records the agreed issues, areas of disagreement and the reasons, along with any reservations.

8. **Annexure B** records the agreed changes made to the provisions contained in Sub-chapter 6.12 Radiocommunications Pathways.

Date: 16 November 2023

Holly Gardiner



Fiona Small

ANNEXURE A – MINUTES RECORDING AREAS OF AGREEMENT AND DISAGREEMENT ON RADIOCOMMUNICATION PATHWAYS

Participants: Holly Gardiner & Fiona Small

Issue	Agreed Position	Disagreements or reservations, with reasons
Controlled activities	The controlled activity status could be suitable for temporary activities e.g., cranes, although there are a lot of variables that would determine whether consent could be granted, e.g., the size of the crane and length of time it is in place, and positioning on a site. Whether a temporary activity occupying the pathways is satisfactory or not depends upon how much signal could be lost due to the proposal and whether there is an alternative signal pathway that could be used. Due to these many variables a consent application may still need to be declined and therefore we agree that a controlled activity status is not appropriate in all circumstances. Further, there is no ability for an application for a controlled activity to be limited notified which would limit the ability for tracking of what developments are occurring within the pathways and consultation with MOJ could not be required.	
Consultation with landowners	Pre-notification engagement for Plan Change 9F – letter sent to every landowner under the pathways. PC14 Consultation – letter to landowners with radio pathways qualifying matter mentioned on list.	

Question from Commissioner Munroe re Awareness of other developments in radio communication pathways	Limited notification pathway will ensure Ministry of Justice are aware of other developments occurring. Council record keeping can also keep track of developments that are proposed in the pathways via resource consenting process.	
Amended chapter provisions	The changes have been discussed and agreed between all parties. In summary, the changes that are additional to those included in the evidence of Fiona Small and the s42A rebuttal evidence of Holly Gardiner are as follows: • Inclusion of an advice note under the permitted and non-complying activity rules to clarify which pathway is which; • Requirement for limited notification to Ministry of Justice when resource consent is required as a non-complying activity as discussed at the hearing; • A new point c. under the non-complying activity rule advising of the appropriate standard against which the effects of the intrusion should be assessed and deletion of the advice note which was included after the prohibited activity rule; • Reference to an additional standard – ITU-R P.526 Propogation by Diffraction. Following further discussion with technical experts, they advised that ITU-R P.530 is the correct	

	standard for the whole of the pathway but reference to ITU-R P.526 is required to determine the effects of an intrusion on the particular pathway; • Amendment of the reference to “a suitably qualified and experienced radio engineer” to a “Ministry of Business, Innovation and Employment Approved Radio Engineer”. These are people who have satisfied MBIE that they have the experience and qualifications suitable to engineer radio licences for MBIE (Radio Spectrum Management); • Addition of a footnote which advises “see rsm.govt.nz for a list of approved radio engineers”; and • Inclusion in each table under Section 6.12.4.2.1 of a reference clarifying which pathway on Planning Map 39 relates to each table.	

Annexure B: Changes to Subchapter 6.12 - Radiocommunication Pathways

DISTRICT PLAN TEXT AMENDMENTS

Key:

For the purposes of this plan change, any unchanged text is shown as normal text or in **bold**, any text proposed to be added by the plan change is shown as **bold underlined** and text to be deleted as ~~**bold strikethrough**~~.

Text in green font identifies existing terms in Chapter 2 – Definitions. Where the proposed change contains a term defined in Chapter 2 – Definitions, the term is shown as **bold underlined text in green** and that to be deleted as ~~**bold strikethrough in green**~~. New definition in a proposed rule is **bold green text underlined in black.**

Text in blue font indicates links to other provisions in the district Plan and/or external documents. These will have pop-ups and links, respectively, in the on-line Christchurch District Plan.

Additional changes to those included in the evidence of Fiona Small and/or the s42A rebuttal evidence of Holly Gardiner are highlighted in yellow.

6.12 Radiocommunication Pathway Protection Corridors

6.12.1 Introduction

a. This introduction is to assist the lay reader to understand how this sub-chapter works and what it applies to. It is not an aid to interpretation in a legal sense.

b. Sub-chapter 6.12 Radio Pathways Protection relates to the management of adverse effects on radiocommunication pathways, recognising the effects on strategic infrastructure (including its role and function) of buildings, structures, and utilities intruding into the pathways.

c. In radiocommunication networks, information is carried across space using radio waves that travel through the air in a straight line. There is a certain volume of airspace around the straight line through which the radio waves need to pass, and the straight line and the surrounding airspace comprise a radiocommunication pathway. The more intrusions into this pathway, the less resilient the pathway becomes (because signals are reduced and become unreliable) and a pathway may even be blocked.

d. A radiocommunication facility is installed on the roof of the Christchurch Justice and Emergency Services Precinct (CJESP), which provides fixed radiocommunication pathways to key radiocommunication sites (such as Mt Pleasant, Cashmere/Victoria Park and Sugarloaf).

e. These pathways provide emergency and day-to-day coverage for Police, Fire and Emergency New Zealand (FENZ) and St John operational vehicles, communication services and Civil Defence services. Disruption of the network can have serious implications for life, property and the environment.

f. Effects on radiocommunication pathways are managed by defining a radiocommunication pathway protection corridor for each radiocommunication link (for example, the pathway between the CJESP and Mt Pleasant) and restricting activities that protrude above certain heights and into the pathways (see Planning Map 39 ~~Appendices 6.12.17.1 – 6.12.17.3~~) are restricted to ensure that vital radiocommunication links are not disrupted.

g. These protection pathways are designed in accordance with the International Telecommunications Union (ITU) recommendations. The ITU is an international treaty organisation that coordinates radio spectrum internationally and also issues recommendations

which form international benchmarks for the design and implementation of radio links. ITU recommendation P.530 is the international benchmark for the design of terrestrial radio links.

h. The provisions in this sub-chapter give effect to the Chapter 3 Strategic Directions Objectives.

6.12.2 Objective and policies

6.12.2.1 Objective — Protection of radiocommunication pathway corridors

a. Radiocommunication pathway protection corridors are protected from activities that would disrupt or block the radiocommunications network associated with the Christchurch Justice and Emergency Precinct.

6.12.2.1.1 Policy - Avoidance of physical obstructions - Cashmere/Victoria Park, Sugarloaf and Mt Pleasant

a. Avoid physical obstructions by any building, structure (including cranes) or utility associated with any activity, including construction or temporary activity, in the radiocommunication pathway protection corridors for Cashmere/Victoria Park, Sugarloaf and Mt Pleasant to maintain radio communication for emergency and day-to-day operations of emergency services.

Advice note:

Refer to 6.12.4.2 Radiocommunication pathway protection corridors and Planning Map 39 ~~Appendices 6.12.17.1 – 6.12.17.3~~ for a description of the radiocommunication pathway protection corridors.

6.12.3 How to interpret and apply the rules

a. The rules that apply to activities within the radiocommunication pathway protection corridors are contained in the activity status tables (including activity specific standards) in Rules 6.12.4.1.

b. Activities within the radiocommunication pathway protection corridors are also subject to the rules in the relevant zone chapters.

c. The activity status tables, rules and standards in the following chapters also apply to activities within the areas covered by the radiocommunication pathway protection corridors (where relevant):

4 Hazardous Substances and Contaminated Land;

5 Natural Hazards;

6 The other sub-chapters of General Rules and Procedures;

7 Transport;

8 Subdivision, Development and Earthworks;

9 Natural and Cultural Heritage; and

11 Utilities and Energy.

d. The maximum height of buildings, structures and utilities permitted in the radiocommunication pathway protection corridors are set out in Tables 6.12.4.2.1 – 6.12.4.2.3. The maximum height of buildings, structures and utilities depends on the distance of the activity from the CJESP, measured in 20m intervals. If an activity falls between two measurements, the most restrictive maximum height will apply.

e. Tables 6.12.4.2.1 – 6.12.4.2.3 set out the absolute maximum height in metres of any obstruction referenced to "A.M.S.L". This refers to metres above mean sea level (A.M.S.L) at the Lyttelton Datum. A correction will need to be made to calculate the available height above existing ground level at each site.

6.12.4 Rules - Radiocommunication Pathway Protection Corridors

6.12.4.1 Activity status tables - Radiocommunication Pathway Protection Corridors

6.12.4.1.1 Permitted activities

a. Within the radiocommunication pathway protection corridors as specified in Rule 6.12.4.2 and shown on Planning Map 39 ~~the diagrams in Appendices 6.12.17.1 – 6.12.17.3~~, the activities listed below are permitted activities.

b. Activities may be controlled, restricted discretionary, discretionary, non-complying or prohibited as specified in Rules 6.12.4.1.2, 6.12.4.1.3, 6.12.4.1.4, 6.12.4.1.5 and 6.12.4.1.6.

Activity		Activity specific standards
P1	Any part of a building, structure (including a crane) or utility that is lower than the maximum height limits specified in Rule 6.12.4.2, Table 1 Cashmere/Victoria Park, Table 2 Sugarloaf and Table 3 Mt Pleasant.	Nil

Advice note: On the maps, the western most pathway is Cashmere/Victoria Park (Table 1), the middle pathway is Sugarloaf (Table 2) and the eastern most pathway is Mt Pleasant (Table 3)

6.12.4.1.2 Controlled activities

There are no controlled activities.

6.12.4.1.3 Restricted discretionary activities

There are no restricted discretionary activities.

6.12.4.1.4 Discretionary activities

There are no discretionary activities.

6.12.4.1.5 Non-complying activities

a. Within the radiocommunication pathway protection corridors as specified in Rule 6.12.4.1 P1 and shown on Planning Map 39 ~~the diagrams in Appendices 6.12.17.1 – 6.12.17.3~~, the activities listed below are non-complying activities.

Activity	
NC1	Any part of a building, structure (including a crane) or utility that does not comply with Rule 6.12.4.1.1 P1.

b. When resource consent under (a) is required, the application shall not be publicly notified and shall be limited notified only to the Ministry of Justice (absent its written approval).

c. An assessment of the effects of the exceedance of the maximum height limit should be undertaken in accordance with ITU-R P.530, *Propagation data and prediction methods required for the design of terrestrial line-of-sight systems* (latest revision), with reference to ITU-R P.526 *Propagation by Diffraction*, by a ~~suitably qualified and experienced radio engineer~~ Ministry of Business, Innovation and Employment Approved Radio Engineer[1].

Advice note: On the maps, the western most pathway is Cashmere/Victoria Park (Table 1), the middle pathway is Sugarloaf (Table 2) and the eastern most pathway is Mt Pleasant (Table 3).

6.12.4.1.6 Prohibited activities

There are no prohibited activities.

~~Advice Note:~~

~~Assessment of the effects of the exceedance of the maximum height limit should be undertaken in accordance with ITU-R P.530 (latest revision) by a suitably qualified and experienced radio engineer.~~

[1] See rsm.govt.nz for a list of Approved Radio Engineers

6.12.4.2 Radiocommunication pathway protection corridors

6.12.4.2.1 Cashmere/Victoria Park

a. Table 1 specifies the radiocommunication pathway protection corridor (horizontal width of clearance zone centred on radio link axis - see Planning Map 39, western most pathway ~~Appendix 6.12.17.1 for map of corridor~~) and the maximum height limit for any part of a building, structure or utility within the Cashmere/Victoria Park radiocommunication pathway protection corridor.

Table 1

Radio Path	CJESP - Cashmere/Victoria Park	
Path Length (km)	5.5	
Azimuth from CJESP (deg TN)[2]	176	
Distance from CJESP	Horizontal width of Clearance Zone centred on Radio Link axis	Maximum Height Limit[3]
(km)	(m)	(m A.M.S.L)
0	0.0	40.5
0.02	0.7	40.5
0.04	1.0	41.1
0.06	1.3	41.7
0.08	1.5	42.3
0.1	1.6	43.0
0.12	1.8	43.7
0.14	1.9	44.4
0.16	2.1	45.1
0.18	2.2	45.8
0.2	2.3	46.5
0.22	2.4	47.2
0.24	2.5	48.0
0.26	2.6	48.7
0.28	2.7	49.5
0.3	2.8	50.2
0.32	2.9	50.9
0.34	3.0	51.7

[2] Degrees True North

[3] m AMSL means metres above mean sea level. Approximate heights above existing ground level are indicated through the property search function of the District Plan.

0.36	3.0	52.5
0.38	3.1	53.2
0.4	3.2	54.0
0.42	3.3	54.7
0.44	3.3	55.5
0.46	3.4	56.3
0.48	3.5	57.0
0.5	3.5	57.8
0.52	3.6	58.6
0.54 (Moorhouse Ave)	3.6	59.4

6.12.4.2.2 Sugarloaf

a. Table 2 specifies the radiocommunication pathway protection corridor (horizontal width of clearance zone centred on radio link axis - see Planning Map 39, middle pathway ~~Appendix 6.12.17.2 for map of corridor~~) and the maximum height limit for any part of a building, structure or utility within the Sugarloaf radiocommunication pathway protection corridor.

Table 2

Radio Path	CJESP - Sugarloaf	
Path Length (km)	7.7	
Azimuth from CJESP (deg TN[4])	171.3	
Distance from CJESP	Horizontal width of Clearance Zone centred on Radio Link axis	Maximum Height Limit [5]
(km)	(m)	(m A.M.S.L)
0	0.00	40.8
0.02	0.74	41.2
0.04	1.04	42.1
0.06	1.27	43.0
0.08	1.47	44.0
0.1	1.64	45.0

[4] Degrees True North

[5] m AMSL means metres above mean sea level. Approximate heights above existing ground level are indicated through the property search function of the District Plan.

0.12	1.79	46.0
0.14	1.94	47.1
0.16	2.07	48.1
0.18	2.19	49.2
0.2	2.30	50.2
0.22	2.41	51.3
0.24	2.52	52.4
0.26	2.62	53.4
0.28	2.71	54.5
0.3	2.80	55.6
0.32	2.89	56.7
0.34	2.98	57.8
0.36	3.06	58.9
0.38	3.14	60.0
0.4	3.22	61.1
0.42	3.29	62.2
0.44	3.36	63.3
0.46	3.43	64.4
0.48	3.50	65.5
0.5	3.57	66.6
0.52	3.64	67.7
0.54 (Moorhouse Ave)	3.70	68.8

6.12.4.2.3 Mt Pleasant

a. Table 3 specifies the radiocommunication pathway protection corridor (horizontal width of clearance zone centred on radio link axis - see Planning Map 39, eastern most pathway ~~Appendix 6.12.17.3 for map of corridor~~) and the maximum height limit for any part of a building, structure or utility within the Mt Pleasant radiocommunication pathway protection corridor.

Table 3

Radio Path	CJESP - Mt Pleasant
Path Length (km)	9.5

Azimuth from CJESP (deg TN[6])	128.7	
Distance from CJESP	Horizontal width of Clearance Zone centred on Radio Link axis	Maximum Height Limit[7]
(km)	(m)	(m A.M.S.L)
0	0.0	40.4
0.02	0.7	40.6
0.04	1.0	41.2
0.06	1.3	41.9
0.08	1.5	42.7
0.1	1.6	43.5
0.12	1.8	44.3
0.14	1.9	45.1
0.16	2.1	45.9
0.18	2.2	46.8
0.2	2.3	47.6
0.22	2.4	48.5
0.24	2.5	49.3
0.26	2.6	50.2
0.28	2.7	51.0
0.3	2.8	51.9
0.32	2.9	52.8
0.34	3.0	53.6
0.36	3.1	54.5
0.38	3.2	55.4
0.4	3.2	56.3
0.42	3.3	57.1
0.44	3.4	58.0
0.46	3.5	58.9
0.48	3.5	59.8
0.5	3.6	60.7
0.52	3.7	61.6

[6] Degrees True North

[7] m AMSL means metres above mean sea level. Approximate heights above existing ground level are indicated through the property search function of the District Plan.

0.54	**3.7**	**62.4**
0.56	**3.8**	**63.3**
0.58	**3.9**	**64.2**
0.6	**3.9**	**65.1**
0.62	**4.0**	**66.0**
0.64	**4.0**	**66.9**
0.66	**4.1**	**67.8**
0.68	**4.2**	**68.7**
0.7	**4.2**	**69.6**
0.72	**4.3**	**70.5**
0.74	**4.3**	**71.4**
0.76	**4.4**	**72.3**
0.78	**4.4**	**73.2**
0.8	**4.5**	**74.2**
0.82	**4.5**	**75.1**
0.84	**4.6**	**76.0**
0.86	**4.6**	**76.9**
0.88	**4.7**	**77.8**
0.9	**4.7**	**78.7**
0.92 (Moorhouse Ave)	**4.8**	**79.6**