

Proposed Selwyn District Plan



Section 42A Report

Report on submissions and further submissions

Light Chapter

Vicki Barker

22 November 2021

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List of submitters and further submitters addressed in this report

Submitter ID	Submitter Name	Abbreviation
DPR-0391	Castle Hill Adventure Tours Limited	
DPR-0442	Castle Hill Community Association Inc.	
DPR-0032	Christchurch City Council	CCC
DPR-0371	Christchurch International Airport Limited	CIAL
DPR-0388	Craigmore Farming Services Limited	
DPR-0372	Dairy Holdings Limited	DHL
DPR-0578	Elene (Helen) Anderson	
DPR-0422	Federated Farmers of New Zealand - North Canterbury	Federated Farmers
DPR-0370	Fonterra Limited	Fonterra
DPR-0456	Four Stars Development & Gould Developments Ltd	Four Stars
DPR-0415	Fulton Hogan Limited	
DPR-0353	Horticulture New Zealand	Hort NZ
DPR-0363	Iport Rolleston Holdings Limited	IRHL
DPR-0414	Kāinga Ora - Homes & Communities	Kāinga Ora
DPR-0159	Lincoln Envirotown Trust	
DPR-0159	Lukas Travnicek	
DPR-0209	Manmeet Singh	
DPR-0460	Marama Te Wai Ltd	
DPR-0068	MetroPort Christchurch	MetroPort
DPR-0453	Midland Port, Lyttelton Port Company Limited	LPC
DPR-0142	New Zealand Pork Industry Board	NZ Pork
DPR-0367	Orion New Zealand Limited	Orion
DPR-0345	Porters Alpine Resort	Porters
DPR-0255	Robert B Glassey	
DPR-0116	Robert Glassey	
DPR-0384	Rolleston Industrial Developments Limited	RIDL
DPR-0374	Rolleston Industrial Holdings Limited	RIHL
DPR-0358	Rolleston West Residential Limited	RWRL
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc.	Forest & Bird
DPR-0207	Selwyn District Council	SDC
DPR-0365	Stuart PC Limited	Stuart PC
DPR-0019	Sue Jarvis	
DPR-0318	Susan Chaney	
DPR-0420	Synlait Milk Limited	Synlait
DPR-0298	Trices Road Re-zoning Group	
DPR-0301	Upper Waimakariri/Rakaia Group	UWRG
DPR-0375	Waka Kotahi NZ Transport Agency	Waka Kotahi
DPR-0215	Winstone Aggregates	

Please refer to **Appendix 1** to see where each submission point is addressed within this report.

Abbreviations

Abbreviations used throughout this report are:

Abbreviation	Full text
CAS	Canterbury Astronomical Society
CE	Coastal Environment
CRPS	Canterbury Regional Policy Statement 2013
DPZ	Dairy Processing Zone
EI	Energy and Infrastructure
GIZ	General Industrial Zone
GRZ	General Residential Zone
GRUZ	General Rural Zone
IMP	Mahaanui Iwi Management Plan 2013
LCZ	Local Commercial Zone
Planning Standards	National Planning Standards
NPS-UD	National Policy Statement on Urban Development
NPS-UDC	National Policy Statement on Urban Development Capacity
ODP	Operative Selwyn District Plan
ONL	Outstanding Natural Landscape
PDP	Proposed Selwyn District Plan
RMA or Act	Resource Management Act 1991
SCA	Specific Control Area
SKIZ	Porters Ski Zone
VAL	Visual Amenity Landscape

1. Purpose of report

- 1.1 This report is prepared under s42A of the RMA in relation to the Light Chapter in the PDP. The purpose of this report is to provide the Hearing Panel with a summary and analysis of the submissions received on this topic and to make recommendations on either retaining the PDP provisions without amendment or making amendments to the PDP in response to those submissions.
- 1.2 The recommendations are informed by both the technical information provided by Mr Muir (see **Appendix 3**) and the evaluation undertaken by me as the planning author. In preparing this report I have had regard to the s42A report on Strategic Directions prepared by Mr Love, the Overview s42A report that addresses the higher order statutory planning and legal context, also prepared by Mr Love, the Part 1 s42A report prepared by Ms Tuilaepa, and the Part 4 s42A report I prepared.
- 1.3 The conclusions reached and recommendations made in this report are not binding on the Hearing Panel. It should not be assumed that the Hearing Panel will reach the same conclusions having considered all the information in the submissions and the evidence to be brought before them, by the submitters.

2. Qualifications and experience

- 2.1 My full name is Vicki Ann Barker. I have been engaged by the Council as a consultant planner. My qualifications include a Bachelor of Science and a Masters of Planning Practice (Hons) from the University of Auckland.
- 2.2 I have 24 years' experience as a resource management planner, with this work including central government, local government and private consultancy experience. I am the Managing Director of Barker Planning, a consultancy based in Christchurch. Prior to establishing Barker Planning I was a Senior Policy Advisor in the Resource Management Practice Team at the Ministry for the Environment and was principally involved in earthquake recovery related matters, RMA reform and RMA best practice advice. I have also held planning roles within local government, at multi-disciplinary global engineering firms, and at a Christchurch based planning consultancy.
- 2.3 I was engaged as a consultant to the Canterbury Earthquake Recovery Authority (CERA) to assist with the Crown response to the Christchurch Replacement District Plan process. In this role I was involved in co-ordinating government department submissions, further submissions, and producing and presenting evidence on behalf of the Crown at the Christchurch Replacement District Plan Hearings.
- 2.4 I have been engaged by Selwyn District Council since 2017 assisting with the Proposed Selwyn District Plan Review. I was responsible for the drafting of the Noise and Special Purpose Dairy Processing Zone Chapters, managed the Signs and Light Chapters as Topic Lead, and latterly was involved in drafting of the Light Chapter. I was also an interim Topic Lead in relation to the Transport Chapter. I also had input into the drafting of the emergency services, airfield and West Melton Aerodrome provisions of the Energy and Infrastructure (EI) Chapter and recently prepared the s42A report for the EI Hearing.

- 2.5 I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014 and that I have complied with it when preparing this report. Having reviewed the submitters and further submitters relevant to this topic I advise there are no conflicts of interest that would impede me from providing independent advice to the Hearings Panel.

3. Scope of report and topic overview

- 3.1 This report considers the submissions and further submissions that were received in relation to the Light Chapter.
- 3.2 Recommendations are made to either retain provisions without amendment, or delete, add to or amend the provisions. All recommended amendments are shown by way of strikeout and underlining in **Appendix 2** to this Report. Footnoted references to a submitter number, submission point and the abbreviation for their title provide the scope for each recommended change. Where it is considered that an amendment may be appropriate, but it would be beneficial to hear further evidence before making a final recommendation, this is made clear within the report. Where no amendments are recommended to a provision, submissions points that sought the retention of the provision without amendment are not footnoted. **Appendix 2** also contains a table setting out recommended spatial amendments to the PDP Planning Maps.
- 3.3 Clause 16(2) of the RMA allows a local authority to make an amendment to a proposed plan without using a Schedule 1 process, where such an alteration is of minor effect, or may correct any minor errors. Several alterations have already been made to the PDP using cl.16(2) and these are documented in reports available on the Council's website. Where a submitter has requested the same or similar changes to the PDP that fall within the ambit of cl.16(2), then such amendments will continue to be made and documented as cl.16(2) amendments and identified by way of a footnote in this s42A report.

4. Statutory requirements and planning framework

Resource Management Act 1991

- 4.1 The PDP must be prepared in accordance with the Council's functions under section 31 of the RMA; Part 2 of the RMA; the requirements of sections 74 and 75, and its obligation to prepare, and have particular regard to, an evaluation report under section 32 of the RMA, any further evaluation required by section 32AA of the RMA; any national policy statement, the New Zealand coastal policy statement, national planning standards; and any regulations¹. Regard is also to be given to the CRPS, any regional plan, district plans of adjacent territorial authorities, and the IMP.
- 4.2 As set out in the [‘Overview’ Section 32 Report](#), and [‘Overview’ s42a Report](#), there are a number of higher order planning documents and strategic plans that provide direction and guidance for the preparation and content of the PDP. These documents are discussed in more detail within this report where relevant to the assessment of submission points. This report also addresses any definitions that are specific to this topic, but otherwise relies on the s42A report that addresses definitions more broadly.

¹ Section 74 RMA

4.3 The assessment of submission points is made in the context of the Section 32 reports already undertaken with respect to this topic, being:

- [Strategic Directions](#)
- [Light](#)

4.4 All recommended amendments to provisions since the initial s32 evaluation was undertaken must be documented in a subsequent s32AA evaluation. No s32AA evaluation has been undertaken as no change in approach is being recommended which is not otherwise covered by the original s32 report.

National Policy Statement

4.5 There are no National Policy Statements relevant to the Light Chapter.

National Planning Standards

4.6 As set out in the [PDP Overview s42A Report](#), the Planning Standards were introduced to improve the consistency of council plans and policy statements. The Planning Standards were gazetted and came into effect on 5 April 2019. The PDP must be prepared in accordance with the Planning Standards.

4.7 The Planning Standards contain the following aspects of relevance to the Light Chapter:

- Section 4. District Plan Structure Standard - Specifies that provisions relating to Light are contained in a separate section within Part 2 - General District-Wide Matters;
- Section 7. District-wide Matters Standard - Specifies that if provisions for managing light are addressed that they must be located in the Light Chapter. These provisions may include: a. provisions for light spill and glare (including light spill limits) for different zones, receiving environments or spatially defined areas; and b. specific requirements for common significant light generating activities.
- Section 14. Definitions Standard - This Standard specifies mandatory definitions to improve plan consistency across the country. There are no specific light related definitions in the Planning Standards.

Regional Policy and Plans

4.8 The CRPS sets out the strategic framework for managing the use, development and protection of the natural and physical resources of the Canterbury region in an integrated and co-ordinated manner. The CRPS does not specifically provide for the management of lighting effects in the Canterbury Region, however Objective 12.2.2 is considered broadly relevant to the proposed sky glow provisions.

12.2.2. Identification and management of other landscapes

The identification and management of other important landscapes that are not outstanding natural landscapes. Other important landscapes may include:

- 1. natural character*
- 2. amenity*

3. historic and cultural heritage

- 4.9 Protection of outstanding natural features and landscapes is a matter of national importance, however other landscapes may also be important at a regional, district or local level. During the consultation phase Environment Canterbury noted that if policies and/or rules to manage night glow were proposed, this would be consistent with Objective 12.2.2 of the CRPS, concerning protection or maintenance of amenity important or significant for the local community.

Mahaanui Iwi Management Plan 2013

- 4.10 The Mahaanui Iwi Management Plan 2013 includes some provisions relevant to light and glare. Section 5.2 Ranginui of Wāhi Tuarima - Ngā take ā-rohe me ngā kaupapa (Part 5 - Regional issues and policy) contains the following issue and policy:
- Issue R2: Cultural amenity - Protection of cultural amenity values such as celestial darkness
 - Ngā Kaupapa/Policy R2.1 - To support the use of light suppression or limitation measures to protect celestial darkness values in some areas.
- 4.11 The explanation to the provisions notes that increased light from development activity such as subdivisions can affect celestial darkness, which is a cultural amenity value for tangata whenua associated with air. A specific issue is identified in relation to the tuna harvest at Te Roto o Wairewa (Lake Forsyth).

NZ Standards

- 4.12 There are NZ Standards that cover different types of outdoor activity lighting including public spaces, workplaces, sporting venues and obtrusive light. Some of the Standards have prescriptive requirements, while others only provide general guidance.
- 4.13 The most relevant light spill standard which has informed the drafting of the District Plan rules is AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting, which replaces the previous version that the ODP light spill rules are based on (AS4282:1997).
- 4.14 Other New Zealand standards, such as AS/NZS1158.1.2:2010 Lighting for roads and public spaces and AS/NZS1680.4:2017 Interior and workplace lighting, provide standards relevant to the lighting requirements of particular activities, but do not specifically consider the effects of that lighting on other sites, apart from providing some general guidance.

5. Procedural matters

- 5.1 At the time of writing this s42A report there have not been any pre-hearing conferences, clause 8AA meetings or expert witness conferencing in relation to submissions on this topic.
- 5.2 While preparing this report it was noticed that submission DPR-0453.050 has not been summarised correctly. The submission has now been correctly summarised in the table in section 18 and in **Appendix 1**. No other procedural issues have been identified.

6. Consideration of submissions

Overview of submissions

- 6.1 A total of 38 original submissions and further submissions were received relevant to the Light Chapter, including 271 original and further submission points. Most of the original submission points are in support and are seeking that the provisions be retained as notified. Where amendment is being sought, the amendments are considered minor and are refinements of the existing provisions. No fundamental change in position or direction has been requested. The provisions which have attracted the most submissions are the light spill levels which set maximum lux levels (LIGHT-REQ1) and the sky glow provisions.

Structure of this report

- 6.2 The report first discusses definitions and then addresses the higher order framework that affects the whole chapter (i.e., Overview, Objective and Policies), followed by the Rules, Rule Requirements Matters for Discretion, Mapping, and then more discrete matters which do not fit neatly elsewhere within the report. The provisions are addressed in the same order as they are set out in the Chapter.
- 6.3 The assessment of submissions follows the following format: Submission Information; Analysis; and Recommendation and Amendments.

7. Definitions

Introduction

- 7.1 This section responds to the submission point relating to the ‘Artificial outdoor lighting’ definition.

Submissions

- 7.2 One submission point was received in relation to the ‘Artificial outdoor lighting’ definition.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0422	Federated Farmers of New Zealand - North Canterbury	025	Oppose In Part	Amend as follows: Any <u>electrically-powered</u> exterior or non-residential interior lighting <u>and/or sign</u> that emits directly into the outdoor environment and includes signs

Analysis

- 7.3 Federated Farmers² are seeking that the definition of ‘Artificial outdoor lighting’ be amended to only apply to “electrically-powered” exterior lighting. Federated Farmers have not provided any reason why they are seeking the definition be limited to electrically-powered exterior lighting only, but presumably it is to avoid solar lighting also being subject to the rules. Mr Muir notes in his evidence at paragraph 6.27 that how the light fitting is powered can have little or no effect on how the light fitting emits light. Therefore, non-electrically powered lighting also needs to be managed in terms of its potential light spill, glare and sky glow effects, and it is recommended that this part of the submission be rejected.
- 7.4 Federated Farmers are also seeking that reference to “non-residential interior” lighting be deleted as they consider the definition for artificial outdoor lighting cannot apply to indoor lighting. The

² 422.25 Federated Farmers

intention behind this part of the definition was to capture significant non-residential interior lighting installations in relation to the likes of large commercial and industrial buildings which emit significant light through windows and in some cases roofs of buildings and potentially contribute to sky glow. As such interior lighting can emit to the exterior of the building it is considered a valid inclusion in this definition. The restructuring of the definition with respect to the reference of signs is not considered to add any additional clarity. Overall, it is recommended that this submission point be rejected.

Recommendation

- 7.5 I recommend, for the reasons given above, that the Hearings Panel retain the definition as notified.
- 7.6 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

8. Chapter Overview

Introduction

- 8.1 This section responds to the submission points relating to the Light Chapter Overview, which principally explains the three main types of obtrusive or adverse lighting effects of light spill, glare and sky glow.
- 8.2 The light spill and glare provisions are standard inclusions in District Plan Light Chapters; however, 'sky glow' is a new term which describes the stray light being scattered into the atmosphere which can be a particular issue for astronomers and night sky observers.

Submissions

- 8.3 Seven submission points were received in relation to the Overview.

Submitter ID	Submitter Name	Submission Point	Plan Reference	Position	Decision Requested
DPR-0159	Lincoln Envirotown Trust	005	LIGHT	Neither Support Nor Oppose	Not specifically stated.
DPR-0358	Rolleston West Residential Limited (RWRL)	258	LIGHT-Overview	Support In Part	Amend as follows: ... The provisions for artificial outdoor lighting provide for adequate lighting to support activities and enable safety and security, while minimising <u>managing</u> potential adverse effects.
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	247	LIGHT-Overview	Support In Part	Amend as follows: ... The provisions for artificial outdoor lighting provide for adequate lighting to support activities and enable safety and security, while minimising <u>managing</u> potential adverse effects.
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	253	LIGHT-Overview	Support In Part	Amend as follows: ... The provisions for artificial outdoor lighting provide for adequate lighting to support activities and

					enable safety and security, while minimising <u>managing</u> potential adverse effects.
DPR-0375	Waka Kotahi NZ Transport Agency	114	LIGHT-Overview	Support In Part	Amend as follows: There are three main types of obtrusive or adverse lighting effects that can cause nuisance to nearby residents, users of adjacent areas <u>and roads</u> , and to astronomical observation. It is also recommended that Council considers the inclusion of reference to AS/NZ 4282:2019.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	265	LIGHT-Overview	Support In Part	Amend as follows: ... The provisions for artificial outdoor lighting provide for adequate lighting to support activities and enable safety and security, while minimising <u>managing</u> potential adverse effects.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	236	LIGHT-Overview	Oppose In Part	Amend the Overview to clearly acknowledge the need for rural and/or primary production to occur at night, and their needs must be considered and balanced with other District priorities like night sky observations.

Analysis

- 8.4 The Lincoln Envirotown³ submission is neither in support or opposition and seeks no specific relief and therefore given the lack of detail it is recommended that this submission point be rejected.
- 8.5 RWRL⁴, IRHL⁵, RIHL⁶ and RIDL⁷ have all sought the same change which is to replace the word “minimising” with “managing” potential adverse effects associated with artificial outdoor lighting within the last sentence in the Overview. It is recommended to reject these submission points as the provisions seek to minimise light spill, glare and potential upward light that causes sky glow i.e. LIGHT-P1 and LIGHT-P3. Furthermore, lighting technology is constantly evolving and improving in terms of its effectiveness and efficiency and therefore it is preferable to strive to minimise effects rather than just manage effects, which is a less directive and meaningful term.
- 8.6 Waka Kotahi⁸ are seeking amendment to also refer to adverse lighting effects with respect to roads. It is recommended that this submission point be accepted as it is more specific than the existing reference to the effects on “users of adjacent areas” and provides added clarity that the lighting effects on roads is a consideration (subject to further recommended amendments to the rule relating to roads in section 14).
- 8.7 Federated Farmers⁹ have requested clear acknowledgement of the need for rural and/or primary production to occur at night, and that their needs are considered and balanced with other District priorities like night sky observations. It is considered that the first and last paragraphs of the

³ 159.005 Lincoln Envirotown Trust

⁴ 358.258 RWRL

⁵ 363.247 IRHL

⁶ 374.253 RIHL

⁷ 384.265 RIDL

⁸ 375.114 Waka Kotahi

⁹ 422.236 Federated Farmers

Overview recognise that there is a need to enable “work” activities to occur at night time and for safety and security to sites, but that potential adverse effects also need to be managed. The word “work” was intentionally chosen to be all encompassing of work-related activities such as primary production and industrial developments, and to not single out activities. Therefore, it is considered that no additional wording is required in the Overview with specific reference to rural production over other work activities, and it is recommended that the submission point be rejected.

Recommendations and amendments

8.8 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend the LIGHT-Overview as shown in **Appendix 2** to provide better clarity that the lighting effects on roads is a consideration.

8.9 The amendments recommended to the LIGHT-Overview are set out in a consolidated manner in **Appendix 2**.

8.10 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

8.11 The scale of change does not require a s32AA evaluation.

9. LIGHT-O1

Introduction

9.1 This section responds to the submission points relating to LIGHT-O1. This proposed single objective replaces numerous more generic objectives across both Volumes of the Operative Plan.

Submissions

9.2 Nine submission points and eight further submission points were received in relation to LIGHT-O1.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	001	Support	Retain as notified.
DPR-0301	Upper Waimakariri/Rakaia Group (UWRG)	FS013	Support	Allow in full
DPR-0415	Fulton Hogan Limited	FS030	Oppose	Disallow the submission.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	FS155	Oppose	Disallow the submission point
DPR-0460	Marama Te Wai Ltd	FS006	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS001	Support	All submission points to be allowed in full.

DPR-0142	New Zealand Pork Industry Board (NZ Pork)	034	Support In Part	Amend LIGHT-O1 as follows: Artificial outdoor lighting enables work, <u>rural production</u> , recreation...
DPR-0372	Dairy Holdings Limited	FS005	Support	Accept the submission.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	FS157	Support	Allow the submission point
DPR-0353	Horticulture New Zealand	210	Oppose In Part	Amend as follows: Artificial outdoor lighting enables work, <u>rural production</u> , recreation, and entertainment activities to occur beyond daylight hours, while....
DPR-0372	Dairy Holdings Limited	FS044	Support	Accept the submission.
DPR-0358	Rolleston West Residential Limited (RWRL)	259	Support In Part	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	248	Support In Part	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	254	Support In Part	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	115	Support In Part	Amend as follows: Artificial outdoor lighting enables work, recreation, <u>transportation</u> , and entertainment activities to occur beyond daylight hours, while: 1. maintaining the health, safety, and amenity values of people; and 2. protecting the District's natural darkness and natural features.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	266	Support In Part	Retain as notified
DPR-0422	Federated Farmers of New Zealand - North Canterbury	237	Support In Part	Amend as follows: Artificial outdoor lighting enables work, <u>rural production</u> , recreation, and entertainment activities to occur beyond daylight hours, ...

Analysis

- 9.3 NZ Pork¹⁰, Hort NZ¹¹ and Federated Farmers¹² are all seeking the same change that specific mention of enabling artificial outdoor lighting for “rural production” be added to the objective. As explained in paragraph 8.7 in relation to the Overview, there is already reference to artificial lighting which enables “work”. This broader term is also considered preferable in the objective as it provides for all work activities, including rural production and a variety of industry and other business operations that are required to operate at night without singling out one activity and potentially omitting others. During drafting the different types of activities that need to be provided for in the objective were carefully considered and the terms chosen are considered all encompassing. Objectives need to remain high level so as not to preclude certain activities or place any primacy on one activity over

¹⁰ 142.034 NZ Pork

¹¹ 353.210 Hort NZ

¹² 422.237 Federated Farmers

another where this is not intended. Therefore, it is recommended that these submission points be rejected.

- 9.4 Waka Kotahi¹³ have requested specific reference to enable light for “transportation”. It is recommended that this submission point be accepted as while transportation could be regarded as “work” and that was the intention, it is considered that specific reference to “transportation” does provide greater clarity that this use is enabled. Inclusion of this term will also provide better connection to the policies. However, the recommended placement of “transportation” in the sentence is in a slightly different order than that sought by Waka Kotahi as the terms “recreation and entertainment” are considered to sit better alongside each other.
- 9.5 Robert Glassey¹⁴, RWRL¹⁵, IRHL¹⁶, RIHL¹⁷ and RIDL¹⁸ are all seeking that the objective be retained as notified. These submission points are recommended to be accepted in part based on the minor recommended amendment.

Recommendations and amendments

- 9.6 I recommend, for the reasons given above, that the Hearings Panel:
- a) Amend Light-O1 as shown in **Appendix 2** to provide clarity that “transportation” is also enabled distinct from “work”.
- 9.7 The amendments recommended to LIGHT-O1 are set out in a consolidated manner in **Appendix 2**.
- 9.8 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.
- 9.9 The scale of change does not require a s32AA evaluation.

10. LIGHT-P1

Introduction

- 10.1 This section responds to the submission points relating to LIGHT-P1.

Submissions

- 10.2 Eight submission points and five further submission points were received in relation to LIGHT-P1.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	002	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS031	Oppose	Disallow the submission.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	FS156	Oppose	Disallow the submission point

¹³ 375.115 Waka Kotahi

¹⁴ 116.001 Robert Glassey

¹⁵ 358.259 RWRL

¹⁶ 363.248 IRHL

¹⁷ 374.254 RIHL

¹⁸ 384.266 RIDL

DPR-0460	Marama Te Wai Ltd	FS007	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS002	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	260	Support	Amend as follows: Manage new artificial outdoor lighting to minimise <u>manage</u> light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe and efficient operation of the land transport network.
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	249	Support	Amend as follows: Manage new artificial outdoor lighting to minimise <u>manage</u> light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe and efficient operation of the land transport network.
DPR-0365	Stuart PC Limited	036	Oppose	Amend to recognise that Industrial Activities need lighting provisions that enable their operation to be effective and efficient and also to protect such activities from reverse sensitivity effects.
DPR-0370	Fonterra Limited	060	Oppose In Part	Amend as follows: Manage new artificial outdoor lighting to minimise light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe and efficient operation of the land transport network, <u>while also recognising that different zones have different functional requirements and amenity expectations.</u>
DPR-0209	Manmeet Singh	FS792	Oppose In Part	Reject submission in part
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	255	Support	Amend as follows: Manage new artificial outdoor lighting to minimise <u>manage</u> light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe and efficient operation of the land transport network.
DPR-0375	Waka Kotahi NZ Transport Agency	116	Support In Part	Amend as follows: Manage new artificial outdoor lighting to minimise light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe, <u>effective</u> and efficient operation of the land transport network.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	267	Support	Amend as follows: Manage new artificial outdoor lighting to minimise <u>manage</u> light spill and glare onto adjoining sites and glare onto roads to provide for the health and safety of people and the safe and efficient operation of the land transport network.

Analysis

- 10.3 Like with the Chapter Overview, RWRL¹⁹, IRHL²⁰, RIHL²¹ and RIDL²² have all sought the same change which is to replace the word “minimise” with “manage”. For the same reasons set out in paragraph 8.5, it is recommended that these submission points be rejected.

¹⁹ 358.260 RWRL

²⁰ 363.249 IRHL

²¹ 364.255 RIHL

²² 384.267 RIDL

- 10.4 Stuart PC Ltd²³ seek amendment to recognise that industrial activities need lighting provisions that enable their operation to be effective and efficient and to protect such activities from reverse sensitivity effects. From the submission it is understood that Stuart PC Ltd. own industrial zoned land in Rolleston that is intended to be developed for concrete manufacturing and distribution. The GIZ Chapter contains objectives and policies which seek to enable industrial activities (i.e., GIZ-O1, GIZ-P1) and avoid incompatible activities (i.e., GIZ-O2 and GIZ-P3). The Lighting Chapter also applies to lighting associated with industrial development in the GIZ, but the objectives and policies of the GIZ also need to be considered in association with development in the zone. These objectives and policies are enabling of industrial activities and provide for consideration of reverse sensitivity effects, including the lighting component of such industrial development. It is therefore recommended that additional policy specific to infrastructure activity is not inserted into the Light Chapter as it would duplicate policy in the GIZ chapter which is already considered to satisfy the submitters relief. Overall, it is recommended that this submission point be rejected.
- 10.5 Fonterra²⁴ are seeking that the policy be expanded to also include recognition that different zones have different functional requirements and amenity expectations. Such an amendment is not considered appropriate to the Light Chapter policy as the zone chapters recognise the functional requirements and amenity expectations of the specific zone. With respect to the Fonterra processing plant, the DPZ objectives and policies recognise that dairy processing activities and facilities are important infrastructure which contribute to the economic vitality and wellbeing of the region, whilst also managing adverse effects. It is also of note that the spill light lux levels that apply to GRUZ land adjoining DPZ is higher than that recommended by AS/NZS4282:2019 to provide these established factories and important infrastructure with some greater leniency. Overall, it is recommended that this submission point be rejected.
- 10.6 Waka Kotahi²⁵ have requested amendments which would result in both light spill and glare onto roads being managed rather than just managing glare, and to refer to “effective” as well as the safe and efficient operation of the land transport network. Currently the lux levels in LIGHT-REQ1 do not manage light spill onto roads and LIGHT-REQ1 specifically excludes roads, which is why the policy was written in this way. However, after further analysis it is considered that the lux light levels should also apply to roads for reasons discussed in paragraphs 18.6-18.7 in association with LIGHT-REQ1. Accordingly, it is recommended that the policy reference the management of light spill onto adjoining sites including roads to make this specific. The addition of “effective” in addition to efficient is considered to add clarity and is also consistent with a similar change recommended in association with EI-P3 in the EI Chapter s42a report²⁶. Therefore, it is recommended that the Waka Kotahi submission point be accepted.
- 10.7 Robert Glassey²⁷ is in support seeking that the policy be retained as notified. It is recommended that this submission point be accepted in part based on the minor recommended amendments.

Recommendations and amendments

²³ 365.036 Stuart PC Ltd

²⁴ 370.060 Fonterra

²⁵ 375.116 Waka Kotahi

²⁶ Paragraph 15.3 - https://www.selwyn.govt.nz/_data/assets/pdf_file/0004/490135/EI-S42a-report-FINAL-23-August-2021.pdf

²⁷ 116-002 Robert Glassey

10.8 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-P1 as shown in **Appendix 2** to provide greater clarity and to achieve consistency with recommended amendments to LIGHT-REQ1.

10.9 The amendments recommended to LIGHT-P1 are set out in a consolidated manner in **Appendix 2**.

10.10 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

10.11 The scale of change does not require a s32AA evaluation.

11. LIGHT-P2

Introduction

11.1 LIGHT-P2 provides direction with respect to temporary activity and emergency response lighting and is linked to the rules which permit outdoor lighting associated with emergency response (LIGHT-R4) and temporary activity (LIGHT-R5).

Submissions

11.2 Ten submission points and six further submission points were received in relation to LIGHT-P2.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	003	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS032	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS008	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS003	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	261	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	250	Support	Retain as notified
DPR-0365	Stuart PC Limited	037	Oppose	Amend policies to recognise that Industrial Activities need to lighting provisions that enable their operation to be effective and efficient and also to protect such activities from reverse sensitivity effects.
DPR-0367	Orion New Zealand Limited	119	Support In Part	Amend as follows: Enable artificial outdoor lighting of short duration outside of daylight hours associated with temporary activities, and artificial outdoor lighting for the purpose of emergency response, and public health and safety.
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS688	Oppose	Reject aspects of the submission which do not directly relate to electricity lines and services as critical infrastructure.
DPR-0370	Fonterra Limited	061	Oppose In Part	Amend as follows: Enable artificial outdoor lighting of short duration outside of daylight hours associated with temporary activities, and

				artificial outdoor lighting for the purpose of emergency response and public health and safety, as also to support 24-hour business operations.
DPR-0209	Manmeet Singh	FS793	Oppose In Part	Reject submission in part
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	256	Support	Retain as notified
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	268	Support	Retain as notified
DPR-0420	Synlait Milk Limited	009	Oppose In Part	Amend as follows: Enable artificial outdoor lighting of short duration outside of daylight hours associated with temporary activities, and artificial outdoor lighting for the purpose of emergency response and public <u>the</u> health and safety <u>of all persons; and the operational requirements of industry.</u>
DPR-0453	Midland Port, Lyttelton Port Company Limited	049	Oppose In Part	Amend as follows Enable artificial outdoor lighting <u>outside of daylight hours, as necessary to facilitate the operations of Important Infrastructure and associated health and safety of people, or</u> artificial outdoor lighting of short duration outside of daylight hours <u>as</u> associated with temporary activities, and artificial outdoor lighting for the purpose of emergency response and public health and safety.
DPR-0375	Waka Kotahi NZ Transport Agency	FS171	Support In Part	Council should carefully consider the wording of this policy to ensure that where lighting is occurring outside of daylight hours, it is managed appropriately to minimise adverse effects on the safety of road users.

Analysis

11.3 The Stuart PC Ltd²⁸ submission point is the same as that in relation to LIGHT-P1 and it is recommended to be rejected for the same reasons outlined in paragraph 10.4.

11.4 Orion²⁹, Fonterra³⁰, Synlait³¹ are all seeking deletion of the wording “of short duration” so that lighting associated with temporary activities and emergency purposes are enabled regardless of their duration. The associated temporary activity lighting rule (LIGHT-R5) seeks to only permit lighting for temporary activities between 0700 and 2200, or otherwise LIGHT-R1 applies. Therefore, removing this reference “of short duration” is then incongruous with the rule and implies that any length of temporary activity is enabled, which is not the case. The definition of ‘temporary activity’ also refers to “limited duration” so the wording in the policy is broadly consistent. Deleting the reference to “of short duration” would not achieve what the submitter is seeking in the absence of any change being sought to LIGHT-R5. Therefore, it is recommended that the submissions be rejected in this respect.

11.5 Fonterra are also seeking that the second reference to “artificial outdoor lighting” be deleted, that “public” is deleted with respect to health and safety, and that there is reference to supporting 24-

²⁸ 365.037 Stuart PC Ltd.

²⁹ 367.119 Orion

³⁰ 370.061 Fonterra

³¹ 420.009 Synlait

hour business operations. Synlait are also seeking the deletion of “public” in relation to health and safety so that health and safety is a consideration to all persons and that the “operational requirements of industry” is referenced.

- 11.6 There is essentially two parts to this policy - one which relates to temporary facilities and one which relates to emergency response. The second reference to artificial outdoor lighting is considered necessary grammatically to make that distinction clear. It is agreed that health and safety is a consideration more generally in a relation to an emergency and therefore deleting “public” is recommended. The addition of reference “to all persons” suggested by Synlait is not considered necessary.
- 11.7 Fonterra, Synlait and LPC³² are all seeking amendment to recognise the operational requirements of industry, which is essentially seeking to add a third component to the policy unrelated to the associated rules (LIGHT-R4 and LIGHT-R5). This is not supported as the activities themselves - dairy processing and port activities - are enabled by provisions in the relevant zone chapters and in the EI Chapter as ‘important infrastructure’. The operational requirements of large industry such as 24-hour operation for example, is already reflected in the zone and EI policies, and the health and safety of people (i.e., which necessitates 24-hour lighting for example) is already recognised in LIGHT-P1. Large industry has the potential to generate significant adverse lighting effects which needs to be managed to minimise light spill and glare, balanced with providing for people’s health and safety. Some flexibility has already been afforded to both the dairy companies and LPC by applying a higher lux level than provided for in AS/NZS4282:2019 with respect to the adjoining rural land given the well-established nature of these facilities and that they are recognised as important infrastructure (commensurate with the ODP lux levels). Technically, large industry can achieve these levels of lighting and not compromise their operational requirements as supported by the evidence of Mr Muir at paragraphs 6.5 and 6.13-6.18.
- 11.8 Overall, it is recommended that the Orion and LPC submission be rejected, and that the Fonterra and Synlait submissions be accepted in part.
- 11.9 Robert Glassey³³ and RWRL³⁴, IRHL³⁵, RIHL³⁶ and RIDL³⁷ are all in support seeking that the policy be retained as notified. It is recommended that these submission points be accepted in part based on the recommended amendment.

Recommendations and amendments

- 11.10 I recommend, for the reasons given above, that the Hearings Panel:
- a) Amend LIGHT-P2 as shown in **Appendix 2** to delete the reference to “public” health and safety so the wording applies more generally.
- 11.11 The amendments recommended to LIGHT-P2 are set out in a consolidated manner in **Appendix 2**.

³² 453.049 LPC

³³ 116.003 Robert Glassey

³⁴ 358.261 RWRL

³⁵ 363.250 IRHL

³⁶ 374.256 RIHL

³⁷ 384.268 RIDL

11.12 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

11.13 The scale of change does not require a s32AA evaluation.

12. LIGHT-P3

Introduction

12.1 This section responds to the submission points relating to LIGHT-P3 which seeks to minimise light that causes sky glow.

Submissions

12.2 Ten submission points and eight further submission points were received in relation to LIGHT-P3.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	004	Support	Generally, retain, however consider explicitly defining the night sky as the stars and the Milky Way.
DPR-0301	Upper Waimakariri/Rakaia Group (UWRG)	FS014	Support	Allow in full
DPR-0415	Fulton Hogan Limited	FS033	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS009	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS004	Support	All submission points to be allowed in full.
DPR-0215	Winstone Aggregates	042	Support	Amend as follows: Minimise potential upward light that causes sky glow by controlling new artificial outdoor lighting to: .. 4. ensure the safe and efficient operation of roads and public pedestrian access, and public sports courts, and grounds while minimising sky glow.
DPR-0345	Porters Alpine Resort	029	Oppose In Part	Amend LIGHT-P3 to read as follows, or wording of similar effect: Minimise potential upward light..... 4. ensure the safe and efficient operation of roads and public pedestrian access, and public sports courts, and grounds and outdoor recreation areas while minimising sky glow.
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS814	Oppose	Reject the submissions
DPR-0358	Rolleston West Residential Limited (RWRL)	262	Support In Part	Amend as follows: Minimise Manage potential upward light that causes sky glow by controlling new artificial outdoor lighting to:...
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	251	Support In Part	Amend as follows: Minimise Manage potential upward light that causes sky glow by controlling new artificial outdoor lighting to:...
DPR-0365	Stuart PC Limited	038	Oppose	Amend policies to recognise that Industrial Activities need to lighting provisions that enable their operation to be

				effective and efficient and also to protect such activities from reverse sensitivity effects.
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	257	Support In Part	Amend as follows: Minimise <u>Manage</u> potential upward light that causes sky glow by controlling new artificial outdoor lighting to:...
DPR-0375	Waka Kotahi NZ Transport Agency	117	Support In Part	Amend as follows: Minimise potential upward light that causes sky glow by controlling new artificial outdoor lighting to: 1. maintain people's ability to view the night sky; and 2. maintain the distinct character and amenity values of the district's night sky; and 3. protect the health and well-being of people and ecosystems. 4. ensure <u>Whilst ensuring</u> the safe, <u>effective</u> and efficient operation of roads and public pedestrian access, and public sports courts, and grounds while minimising sky glow.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	269	Support In Part	Amend as follows: Minimise <u>Manage</u> potential upward light that causes sky glow by controlling new artificial outdoor lighting to:...
DPR-0420	Synlait Milk Limited	010	Oppose In Part	Amend as follows: Minimise potential upward light that causes sky glow by controlling new artificial outdoor lighting to: 4. ensure the safe and efficient operation of roads, <u>important infrastructure</u> and public pedestrian access, and public sports courts, and grounds while minimising sky glow.
DPR-0370	Fonterra Limited	FS017	Support	Accept the submission.
DPR-0375	Waka Kotahi NZ Transport Agency	FS169	Support	Amend LIGHT-P3 to read as follows: 4. ensure <u>Whilst ensuring</u> the safe, <u>effective</u> and efficient operation of roads and public pedestrian access, <u>important infrastructure</u> , and public sports courts, and grounds while minimising sky glow.
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS034	Support	Accept

Analysis

- 12.3 Robert Glassey³⁸ is seeking that the policy be retained but has asked to consider defining ‘night sky’ as the stars and the Milky Way. LIGHT-P3.1 and LIGHT-P3.2 specifically refer to ‘night sky’. In my opinion a definition is not necessary as it is considered clear and simple terminology that is referring to the sky as it is seen at night time, which is readily understood. Therefore, it is recommended that this submission point be accepted in part in that the policy be retained.
- 12.4 Winstone Aggregates³⁹ are seeking that LIGHT-P3.4 be amended to delete “while minimising sky glow” to improve readability. Waka Kotahi⁴⁰ are also seeking amendment to improve the readability of this same clause, by making it a “whilst” clause and adding reference to “effective”. Porters Alpine

³⁸ 116.004 Robert Glassey

³⁹ 215.042 Winstone Aggregates

⁴⁰ 375.117 Waka Kotahi

Resort⁴¹ are seeking the addition of “outdoor recreation areas”. Stuart PC Limited⁴² are seeking recognition of industrial activities, and Synlait⁴³ are seeking the addition of “important infrastructure”.

- 12.5 It is agreed that the readability of the policy can be improved as minimising sky glow is at the start of the policy and is repeated in clause 4. It is recommended that clause 4 is deleted, but that most of the wording is included in the lead in sentence apart from the repeated reference to minimising sky glow. It is also agreed that “effective” be added so the effective and efficient operation of roads is considered.
- 12.6 However, it is not agreed that reference to industry or important infrastructure should be added. Important infrastructure can generate significant lighting effects including sky glow. Likewise, a ski field with unshielded and upward facing lighting could also generate significant sky glow effects. There is no demonstrated need for large industry operators such as Synlait or ski fields to have unshielded upward pointing light sources to enable their operations. For example, the lighting at the LPC inland port is significant and is required for 24-hour operations and health and safety reasons but is shielded from above and directed downward. The provisions are not considered unduly onerous and follow industry best practice. Unless the important infrastructure and industry operators and Porters Alpine Resort provide evidence to demonstrate that it is essential for lighting that is not shielded and directed upward at their sites for their operations, there is no apparent reason why compliance with the sky glow provisions cannot be met. Overall, it is recommended that the Winstone Aggregates and Waka Kotahi submission points be accepted in part (as other amendments to the policy are recommended), and that the Porters Alpine Resort, Stuart PC Ltd and Synlait submission points be rejected.
- 12.7 RWRL⁴⁴, IRHL⁴⁵, RIHL⁴⁶ and RIDL⁴⁷ seek that “Minimise” be replaced with “Manage” at the start of the policy. As per the discussion at paragraph 8.5, the word manage is considered somewhat meaningless in the context of this policy and does not provide as much direction as minimise. “Minimise” sets a clear expectation that potential upward light is to be minimised. This matter has been discussed at previous hearings and the recommended approach is considered consistent. It is recommended that these submission points be rejected.

Recommendations and amendments

- 12.8 I recommend, for the reasons given above, that the Hearings Panel:
- a) Amend LIGHT-P3 as shown in **Appendix 2** to improve readability.
- 12.9 The amendments recommended to LIGHT-P3 are set out in a consolidated manner in **Appendix 2**.

⁴¹ 345.029 Porters Alpine Resort

⁴² 365.038 Stuart PC Ltd

⁴³ 420.010 Synlait

⁴⁴ 358.262 RWRL

⁴⁵ 363.251 IRHL

⁴⁶ 374.257 RIHL

⁴⁷ 384.269 RIDL

12.10 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

12.11 The scale of change does not require a s32AA evaluation.

13. LIGHT-R1

Introduction

13.1 This section responds to the submission points relating to LIGHT-R1 which permits artificial outdoor lighting not associated with any other specific rule, subject to compliance with the rule requirements relating to light spill, glare and sky glow.

Submissions

13.2 Eight submission points and four further submission points were received in relation to LIGHT-R1.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	005	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS034	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS010	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS005	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	263	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	252	Support	Retain as notified
DPR-0365	Stuart PC Limited	039	Oppose	Amend the Light Spill standard to better enable activities within the GIZ to operate 24/7.
DPR-0367	Orion New Zealand Limited	121	Support	Retain as notified.
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS690	Oppose	Reject aspects of the submission which do not directly relate to electricity lines and services as critical infrastructure.
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	258	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	118	Support In Part	Retain as notified, subject to the suggested amendments below to the applicable rule requirements.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	270	Support	Retain as notified

Analysis

13.3 The amendments sought to the rule requirements by Stuart PC Ltd⁴⁸ and Waka Kotahi⁴⁹ are addressed in section 18 below in relation to LIGHT-REQ1 Light Spill. On this basis it is recommended that the Stuart PC Ltd submission be rejected and that the Waka Kotahi submission be accepted in part.

13.4 Robert Glassey⁵⁰, RWRL⁵¹, IRHL⁵², Orion⁵³, RIHL⁵⁴ and RIDL⁵⁵ are all in support seeking the rule be retained as notified. It is recommended that these submission points be accepted.

Recommendation

13.5 I recommend, for the reasons given above, that the Hearings Panel retain LIGHT-R1 as notified.

13.6 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

14. LIGHT-R2

Introduction

14.1 This section responds to the submission points relating to LIGHT-R2 which permits artificial outdoor lighting for roads and public pedestrian accessways and cycleways, subject to a sky glow rule requirement specific to roads and public pedestrian accessways and cycleways (LIGHT-REQ4).

Submissions

14.2 Six submission points and three further submission points were received in relation to LIGHT-R2.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	006	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS035	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS011	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS006	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	264	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	253	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	259	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	119	Support	Retain as notified.

⁴⁸ 365.039 Stuart PC Ltd.

⁴⁹ 375.118 Waka Kotahi

⁵⁰ 116.005 Robert Glassey

⁵¹ 358.263 RWRL

⁵² 363.252 IRHL

⁵³ 367.121 Orion

⁵⁴ 374.258 RIHL

⁵⁵ 384.270 RIDL

DPR-0384	Rolleston Industrial Developments Limited (RIDL)	271	Support	Retain as notified
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Analysis

- 14.3 All submitters, including Robert Glassey⁵⁶, RWRL⁵⁷, IRHL⁵⁸, RIHL⁵⁹, Waka Kotahi⁶⁰ and RIDL⁶¹, are in support and seek that LIGHT-R2 be retained as notified.

Recommendation

- 14.4 I recommend, for the reasons given above, that the Hearings Panel retain LIGHT-R2 as notified.
- 14.5 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

15. LIGHT-R3

Introduction

- 15.1 This section responds to the submission points relating to LIGHT-R3 which permits artificial outdoor lighting for public sports courts and grounds, subject to a sky glow rule requirement specific to public sports courts and grounds (LIGHT-REQ5).

Submissions

- 15.2 Eight submission points and five further submission points were received in relation to LIGHT-R3.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0019	Sue Jarvis	002	Support In Part	Not specified
DPR-0116	Robert Glassey	007	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS036	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS012	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS007	Support	All submission points to be allowed in full.
DPR-0345	Porters Alpine Resort	030	Oppose In Part	Amend the title of LIGHT-R3 to read as: LIGHT-R3 Artificial Outdoor Lighting - Recreation Amend LIGHT-R3.1. to read as: 1. Artificial outdoor lighting for public sports courts, grounds, ski and outdoor recreation areas.
DPR-0391	Castle Hill Adventure Tours Limited	FS004	Support	We wish the submission point to be allowed in full as requested by Porters Alpine Resort
DPR-0407	Royal Forest & Bird Protection Society	FS815	Oppose	Reject the submissions

⁵⁶ 116.006 Robert Glassey

⁵⁷ 358.264 RWRL

⁵⁸ 262.253 IRHL

⁵⁹ 374.259 RIHL

⁶⁰ 375.119 Waka Kotahi

⁶¹ 384.271 RIDL

	<i>of New Zealand Inc. (Forest & Bird)</i>			
DPR-0358	Rolleston West Residential Limited (RWRL)	265	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	254	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	260	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	120	Support In Part	Amend as follows: Where this activity complies with the following rule requirements: <u>LIGHT-REQ2 Glare</u> <u>LIGHT-REQ5 Sky Glow - Public Sports Courts and Grounds</u>
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	272	Support	Retain as notified

Analysis

- 15.3 Porters Alpine Resort⁶² consider that LIGHT-R3 should also make provision for outdoor lighting within the SKIZ consistent with the ODP. The ODP manages night lighting within the Porters Ski Area as a restricted discretionary activity which enables a bespoke lighting plan to be developed for the specific needs of outdoor sports conducted in the alpine environment. The amendments to the provisions that Porters Alpine Resort have requested in effect provides for “ski and outdoor recreation areas” as permitted subject to compliance with LIGHT-REQ5-Sky Glow - Public Sports Courts and Grounds, which is a more permissive stance than the ODP.
- 15.4 LIGHT-REQ5 has been specifically developed to manage sports courts and ground lighting, and not ski field lighting. Ski field lighting would likely have different requirements to sports court and grounds lighting. Therefore, it is intentional that ski field lighting is assessed in accordance with LIGHT-R1 and the associated rule requirements, whereby it would either be permitted or require a restricted discretionary activity resource consent. Restricted discretionary activity status is the same activity status as the ODP, which Porters requested in their submission and during drafting of the PDP, which enables an assessment and consideration of the effects of any proposed bespoke ski area lighting.
- 15.5 A prescriptive permitted activity rule for such lighting as has been drafted for sports courts and grounds would be difficult to achieve as the lighting is bespoke and therefore variable. An alternative would be to include a rule in the Light Chapter which specifically provides for ski field lighting as a restricted discretionary activity in the SKIZ, but this is not considered necessary as LIGHT-R1 already achieves either permitted or restricted discretionary activity status depending on the level of effects. Therefore, it is recommended that this submission point be rejected.
- 15.6 Waka Kotahi⁶³ are seeking that LIGHT-R3 also be subject to LIGHT-REQ2 Glare, which requires all artificial outdoor lighting to be directed away from and/or screened from adjoining properties and

⁶² 345.030 Ports Alpine Resort

⁶³ 375.120 Waka Kotahi

roads. LIGHT-REQ5.1.a requires light to be “directed downward and shielded from above”, but the addition of LIGHT-REQ2 would also ensure that light is directed away from and/or screened from adjoining properties and roads. The addition of this rule requirement would ensure glare onto the transportation network from such lighting is managed, as supported by the evidence of Mr Muir at paragraph 6.19. Therefore, it is recommended that the Waka Kotahi submission point be accepted.

15.7 Sue Jarvis⁶⁴ supports the provision in part but the decision requested is not specified. Therefore, this submission point is recommended to be accepted in part.

15.8 Robert Glassey⁶⁵, RWRL⁶⁶, IRHL⁶⁷, RIHL⁶⁸, and RIDL⁶⁹ are all in support and are seeking that the rule be retained as notified. It is recommended that these submission points be accepted in part given minor amendment is recommended.

Recommendations and amendments

15.9 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-R3 as shown in **Appendix 2** to include reference to LIGHT-REQ2 to specifically manage glare from public sports courts and grounds lighting onto adjoining properties and roads.

15.10 The amendments recommended to LIGHT-R3 are set out in a consolidated manner in **Appendix 2**.

15.11 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

15.12 The scale of change does not require a s32AA evaluation.

16. LIGHT-R4

Introduction

16.1 LIGHT-R4 permits artificial outdoor lighting for the purpose of emergency response, subject to no rule requirements.

Submissions

16.2 Seven submission points and five further submission points were received in relation to LIGHT-R4.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	008	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS037	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS013	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so

⁶⁴ 019.002 Sue Jarvis

⁶⁵ 116.007 Robert Glassey

⁶⁶ 358.265 RWRL

⁶⁷ 363.254 IRHL

⁶⁸ 374.260 RIHL

⁶⁹ 384.272 RIDL

DPR-0578	Elene (Helen) Anderson	FS008	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	266	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	255	Support	Retain as notified
DPR-0367	Orion New Zealand Limited	116	Support In Part	Amend as follows: 1. Artificial outdoor lighting for the purpose of emergency response, <u>or urgent repairs and maintenance of important infrastructure.</u>
DPR-0375	Waka Kotahi NZ Transport Agency	FS168	Support	Accept the proposed amendment.
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS685	Oppose	Reject aspects of the submission which do not directly relate to electricity lines and services as critical infrastructure.
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	261	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	121	Support	Retain as notified.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	273	Support	Retain as notified

Analysis

- 16.3 The only submitter seeking amendment to LIGHT-R4 is Orion⁷⁰. In addition to permitting lighting for the purpose of emergency response, Orion are seeking to also permit lighting for “urgent repairs and maintenance of important infrastructure”. This amendment is being sought to ensure this rule extends to emergency repairs and maintenance undertaken by a network utility operator.
- 16.4 In the EI Chapter, EI-R6 permits the operation, maintenance and repair of existing above and below ground network utilities, without being subject to any lighting provisions. Therefore, emergency repairs or maintenance of network utilities involving any outdoor artificial lighting is already permitted by EI-R6. On this basis it is considered there is no need to amend LIGHT-R4 and that the submission point be rejected.
- 16.5 Robert Glassey⁷¹, RWRL⁷², IRHL⁷³, RIHL⁷⁴, Waka Kotahi⁷⁵ and RIDL⁷⁶ are all in support seeking that the rule be retained as notified. It is recommended that these submission points be accepted.

Recommendation

- 16.6 I recommend, for the reasons given above, that the Hearings Panel retain LIGHT-R4 as notified.

⁷⁰ 367.116 Orion

⁷¹ 116.008 Robert Glassey

⁷² 358.266 RWRL

⁷³ 363.255 IRHL

⁷⁴ 374.261 RIHL

⁷⁵ 375.121 Waka Kotahi

⁷⁶ 384.273 RIDL

- 16.7 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

17. LIGHT-R5

Introduction

- 17.1 LIGHT-R5 permits artificial outdoor lighting for any temporary activity which operates between 7am and 10pm only and is not subject to any rule requirements. Otherwise, LIGHT-R1 applies.

Submissions

- 17.2 Seven submission points and three further submission points were received in relation to LIGHT-R5.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	009	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS038	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS014	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS009	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	267	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	256	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	262	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	122	Support In Part	Amend as follows: 1. Artificial outdoor lighting for any temporary activity which operates between 0700 and 2200 only, otherwise LIGHT-R1 applies. <u>Where this activity complies with the following rule requirements:</u> <u>LIGHT-REQ2 Glare</u>
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	274	Support	Retain as notified

Analysis

- 17.3 Waka Kotahi⁷⁷ support enabling temporary activities, however, seek that temporary activities are subject to LIGHT-REQ2 to manage glare from these activities onto the roading network to provide for a safe, effective and efficient land transport network. During the hours of darkness between 7am and 10pm when the rule applies, it is agreed with Waka Kotahi that glare onto roads should be managed for safety reasons.

⁷⁷ 375.122 Waka Kotahi

17.4 LIGHT-REQ2 also applies to adjoining properties, and this is also supported as a way of ensuring amenity is managed in relation to neighbouring sites. Even where an activity is temporary, the rule requirement can be readily achieved through placement, orientation and /or screening without the need for any technical parameters to be met and therefore is not considered unduly onerous in relation to a temporary activity with short-term effects. Mr Muir also agrees with this addition at paragraph 6.20 of his evidence. Therefore, it is recommended that this submission point be accepted and that a consequential cl 16(2) amendment also be made to the activity status column of the rule to reference the activity status relevant to the rule requirement.

17.5 Robert Glassey⁷⁸, RWRL⁷⁹, IRHL⁸⁰, RIHL⁸¹, and RIDL⁸² are all in support and seek that the policy be retained as notified. It is recommended that these submission points be accepted in part given that amendment is recommended as a result of the Waka Kotahi submission point.

Recommendations and amendments

17.6 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-R5 as shown in **Appendix 2** to manage glare in association with temporary activities and make a clause 16(2) consequential minor amendment to the activity status column.

17.7 The amendments recommended to LIGHT-R5 are set out in a consolidated manner in **Appendix 2**.

17.8 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

17.9 The scale of change does not require a s32AA evaluation.

18. LIGHT-REQ1

Introduction

18.1 This section responds to the submission points relating to LIGHT-REQ1 which sets maximum light spill lux levels from artificial outdoor lighting.

Submissions

18.2 Thirteen submission points and six further submission points were received in relation to LIGHT-REQ1.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0068	MetroPort Christchurch (MetroPort)	017	Oppose	Amend this provision so that the 2200 to 0600 level for the Port Zone is 10 lux where it adjoins the General Industrial Zone, which is more appropriate standard.

⁷⁸ 116.009 Robert Glassey

⁷⁹ 358.267 RWRL

⁸⁰ 363.256 IRHL

⁸¹ 374.262 RIHL

⁸² 384.274 RIDL

DPR-0358	Rolleston West Residential Limited (RWRL)	FS154	Support	Adopt
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	FS154	Support	Adopt
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	FS154	Support	Adopt
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	FS154	Support	Adopt
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS002	Support	Approve
DPR-0358	Rolleston West Residential Limited (RWRL)	268	Support In Part	Amend this provision to provide more appropriate and achievable lux levels.
DPR-0358	Rolleston West Residential Limited (RWRL)	269	Support In Part	Amend provision to state that levels be assessed from the 'notional boundary' or a point 20m from the side of any building used for a 'sensitive activity.'
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	257	Support In Part	Amend this provision to provide more appropriate and achievable lux levels.
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	258	Support In Part	Amend provision to state that levels be assessed from the 'notional boundary' or a point 20m from the side of any building used for a 'sensitive activity.'
DPR-0370	Fonterra Limited	062	Support	Retain as notified
DPR-0209	Manmeet Singh	FS794	Oppose In Part	Reject submission in part
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	263	Support In Part	Amend this provision to provide more appropriate and achievable lux levels.
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	264	Support In Part	Amend provision to state that levels be assessed from the 'notional boundary' or a point 20m from the side of any building used for a 'sensitive activity.'
DPR-0375	Waka Kotahi NZ Transport Agency	123	Support In Part	Amend to provide clarification on how this rule applies to roads and controls the effects of light spill onto/from roads.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	275	Support In Part	Amend this provision to provide more appropriate and achievable lux levels.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	276	Support In Part	Amend provision to state that levels be assessed from the 'notional boundary' or a point 20m from the side of any building used for a 'sensitive activity.'
DPR-0442	Castle Hill Community Association Inc.	005	Support In Part	Amend LIGHT-REQ1 by adding Castle Hill Village to LIGHT - TABLE1 - Maximum Light Spill from Artificial Outdoor Lighting at the same level as GRUZ.
DPR-0453	Midland Port, Lyttelton Port Company Limited	050	Oppose	Amend LIGHT-TABLE1 as follows: Zone of the adjoining site receiving light spill (<u>unless otherwise stated</u>) GRUZ adjoining DPZ or PORTZ, SKIZ (<u>as measured at the notional boundary of any rural dwelling in the GRUZ</u>): Or in the alternative: GRUZ adjoining DPZ or Portz, SKIZ 2200 to 0600: <u>10 3-lux</u>

				Hours of darkness from 0600 to 2200 <u>25</u> lux CMUZ, GIZ, PORTZ, KNOZ 2200 to 0600: <u>25</u> lux ... Refer to original submission for full decision requested.
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Analysis

- 18.3 Metroport⁸³ are seeking that the 2200 to 0600 level for PORTZ is 10 lux where it adjoins the GIZ, which Metroport considers is the more appropriate standard. The PDP applies a level of 5 lux within the PORTZ and GIZ from 2200 to 0600. Mr Muir addresses this submission point at paragraphs 6.1 to 6.5 of his evidence and notes that the ODP level is 10 lux; however, that level was based on the former Standard (AS4282:1985) and 25–30-year-old research, and that lighting technology has changed significantly since that time. Mr Muir confirms that the level of 5 lux in the PDP is based on the new standard (AS/NZS4282:2019) and that the level is not onerous or restrictive. Based on the evidence of Mr Muir it is recommended that this submission point be rejected.
- 18.4 RWRL⁸⁴, IRHL⁸⁵, RIHL⁸⁶, and RIDL⁸⁷ are seeking amendment to provide more appropriate and achievable lux levels. The submitters consider the specified lux levels do not sufficiently recognise the health and safety, operational and functional requirements of businesses in the CMUZ and GIZ, especially with night-time operations. The submission does not specify what lux levels it is instead seeking, but as mentioned in paragraph 18.3, 10 lux currently applies under the ODP which is more lenient than the PDP. However, the PDP levels of 5 lux between 2200 to 0600 and 25 lux during the hours of darkness from 0600 to 2200 which apply in CMUZ, GIZ, PORTZ and KNOZ are based on AS/NZS 4282:2019. Mr Muir's evidence at paragraph 6.6 disagrees with an increase in lux levels for the same reasons set out in relation to the Metroport submission (refer to paragraphs 6.1 to 6.5 of his evidence). Based on the evidence of Mr Muir it is recommended that these submission points be rejected.
- 18.5 RWRL⁸⁸, IRHL⁸⁹, RIHL⁹⁰, and RIDL⁹¹ also consider the rules should apply at the 'notional boundary' or a point 20m from the side of any building used for a 'sensitive activity'. 'Notional boundary' is defined in the PDP as *"means a line 20 metres from any side of a residential unit or other building used for a noise sensitive activity, or the legal boundary where this is closer to such a building."* The evidence of Mr Muir addresses these submission points at paragraphs 6.7 to 6.9 and notes that AS/NZS 4282:2019 describes where light spill is measured from, and this is typically 10m from the boundary or on the building line if the building is located closer than 10m to the boundary. Applying measurement at the notional boundary as defined in the PDP would be more lenient and inconsistent with AS/NZS 4282:2019. Therefore, based on Mr Muir's evidence it is recommended that these submission points be rejected.

⁸³ 068.017 Metroport

⁸⁴ 358.268 RWRL

⁸⁵ 363.257 IRHL

⁸⁶ 374.263 RIHL

⁸⁷ 384.275 RIDL

⁸⁸ 358.269 RWRL

⁸⁹ 363.258 IRHL

⁹⁰ 374.264 RIHL

⁹¹ 384.276 RIDL

- 18.6 Waka Kotahi⁹² are seeking clarification about how this rule applies to roads and controls the effects of light spill onto/from roads. It is of note that LIGHT-REQ1.1 currently specifically excludes roads. Waka Kotahi state in their submission that as roads are excluded from the rule, clarity is required as to whether this allows unlimited levels of light spill onto roads, or it is intended that light spill from roads is not limited. Waka Kotahi are concerned about excessive light spill onto roads and the adverse effects on the safe, effective and efficient functioning of the land transport network.
- 18.7 Mr Muir considers that light spill levels onto roads should also be managed because excessive light spill is also an issue with respect to road user safety in addition to glare. In addition, Mr Muir considers that light spill from road lighting itself should not be subject to the light spill levels in LIGHT-REQ1 because road lighting is managed by the AS/NZS1158 series of standards. Refer to paragraphs 6.21-6.22 of Mr Muir's evidence. My understanding is that LIGHT-REQ1 was drafted to exclude consideration of light spill effects onto roads as it was considered that glare was the predominant effect to manage with respect to effects on road users. However, based on Mr Muir's evidence, it is accepted that excessive light spill is also an issue that needs to be managed and, on this basis, it is recommended that amendment is made to include roads. As 'adjoining' and 'site' which are referenced in LIGHT-REQ1.1 are defined terms in the PDP and 'adjoining' includes land separated by a road, for clarity it is recommended that "including roads" be added to LIGHT-REQ1.1. For added clarity an advisory note is also recommended to be added to make it clear that LIGHT-REQ1 does not apply to light spill from roads. This change is within scope of the Waka Kotahi submission.
- 18.8 Castle Hill Community Association Inc.⁹³ are seeking light levels the same as GRUZ apply within Castle Hill Village, which is 1 lux from 2200 to 0600 and 5 lux from 0600 to 2200, rather than the RESZ limits of 2 and 10 lux respectively. The submission does not specifically state why the Association is seeking that lower limits apply, but it is expected it is because the Association consider the environment is more akin to a rural zone than a typical residential zone in terms of amenity and character.
- 18.9 The Residential Baseline Report notes: *"Castle Hill Village is located in a basin surrounded by mountains and native bush with views towards the Thomas River, Castle Hill reserve, Torlesse Range, Craigieburn Range, Flock Hill and Waimakariri River. The Village can be visually divided into an 'old' and a 'newer' part. Built form in the 'old' part of the Village is well integrated amongst the surrounding established tree plantings and does not detract from views to the surrounds. Recent development is more on display, as the location lacks established greenery and also due to the larger size of buildings. Throughout the entire Village there is a strong presence of the alpine theme..... Of all the alpine villages and EDAs, Castle Hill displays the most cohesive environment. The current built form characteristics are unique and cannot be compared with any other settlement in the District.*
- 18.10 The Baseline Report also states: *The presence of street lighting is in keeping with providing safety and amenity at night time in residential areas. It is not in keeping with an alpine environment, where light spill is aimed to be kept at a minimum, which is why street lights have only been used in strategic locations rather than throughout the village.*

⁹² 375.123 Waka Kotahi

⁹³ 442.005 Castle Hill Community Association Inc.

- 18.11 Castle Hill Village is zoned both GRZ and LCZ. Development within the GRZ and LCZ is subject to SCA rules (GRZ-REQ16, LCZ-REQ8 and SCA-AD2) which manage building design (roof pitch, cladding, reflectivity etc) in recognition of the distinct character of the village. It is also of note that Castle Hill is subject to a proposed ONL Overlay. Based on the uniqueness of the village and its different level of amenity more akin to a rural zone, it is agreed that a lower lux level would be appropriate within the Village. This is also supported by Mr Muir's evidence at paragraphs 6.25-6.26 as he considers Castle Hill corresponds with an Environmental Zone of Low District Brightness as set out in AS/NZS 4282:2019 and that the GRUZ lux levels would be appropriate.
- 18.12 The need for differing levels in the GRZ and LCZ parts of the Village was considered, and based on the advice of Mr Muir, it is considered that a consistent level can be applied across the entire Village as it will not unduly compromise any small-scale commercial development potential and operation within the Village. From an amenity perspective, consistent lighting levels across the Village is also preferable to achieve consistency across the SCA. Therefore, it is recommended that the submission point be accepted and that SCA-AD2 be added below GRUZ in LIGHT-Table 1.
- 18.13 LPC⁹⁴ are seeking amendment to LIGHT-TABLE 1 to: add the wording "unless otherwise stated" to the first row of TABLE1; and apply a 25 lux level at all times in the CMUZ, GIZ, PORT and KNOZ as measured at the notional boundary of any rural dwelling in the GRUZ; or as an alternative, to increase the lux levels from 3 and 5 lux in the adjoining GRUZ zone to 10 and 25 lux, and to increase the lux levels in the CMUZ, GIZ, PORTZ and KNOZ from 5 lux to 25 lux between 2200 to 0600 (and retain the 0600 to 2200 level at 25 lux). LPC consider the levels as notified are not sufficient to enable safe lighting for Port activities and that 5 lux in the PORTZ and other zones is not necessary or appropriate.
- 18.14 Measurement at the notional boundary has already been discussed at paragraph 18.5 and is not considered appropriate. Mr Muir's evidence at paragraphs 6.13-6.18 addresses the increase in lux levels that the Port is seeking and does not agree with the changes being sought. Mr Muir considers that 3 lux and 5 lux is appropriate within the adjoining GRUZ and that it is not onerous or restrictive to meet. Mr Muir also notes that 5 lux from 2200 to 0600 within the PORTZ (and CMUZ, GIZ and KNOZ) is aligned with AS/NZS 4282:2019 and commercial/industrial areas and that 5 lux is not onerous or restrictive. Mr Muir also considers that 25 lux is particularly excessive and is more aligned with a televised sporting venue.
- 18.15 There are examples of large industry embracing the advances in LED technology to deliver targeted lighting which enables industry to operate safely and effectively 24 hours, and which results in overall energy and costs savings. A particularly relevant example is the Ports of Auckland move to LED floodlighting⁹⁵. Overall, it is recommended that the LPC submission point be rejected.
- 18.16 Fonterra⁹⁶ are seeking that LIGHT-REQ1 be retained as notified. It is of note that some leniency has been applied with respect to the well-established DPZ and PORTZ adjoining rural land and that it is recommended that a level of 3 lux apply rather than 1 lux in recognition of the established important infrastructure within these zones. It is recommended that this submission point be accepted in part

⁹⁴ 453.050 LPC

⁹⁵ <https://www.poal.co.nz/media/lighting-the-way-to-a-greener-future-led-floodlighting-for-aucklands-port-brings-massive-energy-savings>

⁹⁶ 370.062 Fonterra

given minor amendment is recommended to LIGHT-REQ1 to provide lower lux levels to Castle Hill Village.

Recommendations and amendments

18.17 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-REQ1 as shown in **Appendix 2** to manage light spill lux levels onto roads and clarify that light spill from road lighting within roads is not a consideration, and to reduce the lux levels applicable to development within Castle Hill Village (SCA-AD2).

18.18 The amendments recommended to LIGHT-REQ1 are set out in a consolidated manner in **Appendix 2**.

18.19 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

18.20 The scale of change does not require a s32AA evaluation.

19. LIGHT-REQ2

Introduction

19.1 This section responds to the submission points relating to the LIGHT-REQ2 which manages glare.

Submissions

19.2 Six submission points were received in relation to LIGHT-REQ2.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0318	Susan Chaney	002	Support In Part	Requests that glare be addressed as it can be dangerous whilst driving.
DPR-0358	Rolleston West Residential Limited (RWRL)	270	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	259	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	265	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	124	Support In Part	Amend as follows: 1. Fixed Artificial outdoor lighting is directed away from and/or screened from adjoining properties and roads.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	277	Support	Retain as notified

Analysis

19.3 Susan Chaney⁹⁷ submits that glare can be dangerous when driving and requests that glare be addressed. It is agreed that glare can be dangerous when driving and LIGHT-REQ2 has been included

⁹⁷ 318.002 Susan Chaney

to manage this effect with respect to both adjoining properties and roads. This rule requirement is considered to already address the glare effects of outdoor lighting managed by LIGHT-R1 and LIGHT-REQ2 on roads and drivers on roads. Therefore, it is recommended that this submission point be accepted.

- 19.4 Waka Kotahi⁹⁸ are seeking that the wording be amended to delete the reference to “fixed” artificial outdoor lighting so that in effect the rule requirement would capture all artificial outdoor lighting fixed or otherwise. Waka Kotahi supports managing glare to prevent safety risks associated with the effects of glare on road users, but considers the effects are not just limited to fixed lighting. For example, lit mobile irrigators could potentially be an issue and emit glare onto roads. This is supported by the evidence of Mr Muir at paragraph 6.24. It is recommended that this submission point be accepted as it is agreed that non-fixed and mobile sources of light could also generate glare effects.
- 19.5 RWRL⁹⁹, IRHL¹⁰⁰, RIHL¹⁰¹ and RIDL¹⁰² are all in support and seek that the provision be retained as notified. It is recommended that these submissions be accepted in part based on the recommendation to amend LIGHT-REQ2 in response to the Waka Kotahi submission.

Recommendations and amendments

- 19.6 I recommend, for the reasons given above, that the Hearings Panel:
- a) Amend LIGHT-REQ2 as shown in **Appendix 2** to ensure that all artificial outdoor lighting to which LIGHT-REQ2 is managed with respect to glare effects and not just fixed lighting.
- 19.7 The amendments recommended to LIGHT-REQ2 are set out in a consolidated manner in **Appendix 2**.
- 19.8 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.
- 19.9 The scale of change does not require a s32AA evaluation.

20. LIGHT-REQ3

Introduction

- 20.1 This section responds to the submission points relating to the LIGHT-REQ3 which manages sky glow in general.

Submissions

- 20.2 Eleven submission points and fifteen further submission points were received in relation to LIGHT-REQ3.

⁹⁸ 375.124 Waka Kotahi

⁹⁹ 358.270 RWRL

¹⁰⁰ 363.259 IRHL

¹⁰¹ 374.265 RIHL

¹⁰² 384.277 RIDL

Submitter ID	Submitter Name	Submission Point	Plan Reference	Position	Decision Requested
DPR-0104	Lukas Travnicek	008	LIGHT-REQ3	Oppose	Delete application of this rule requirement (inferred to be in relation to LIGHT-REQ3) to ONL areas.
DPR-0301	Upper Waimakariri/Rakaia Group (UWRG)	FS012	LIGHT-REQ3	Oppose	Disallow in full
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS560	LIGHT-REQ3	Oppose	Reject the submission
DPR-0116	Robert Glassey	010	LIGHT-REQ3	Support	Retain as notified.
DPR-0301	Upper Waimakariri/Rakaia Group (UWRG)	FS015	LIGHT-REQ3	Support	Allow in full
DPR-0415	Fulton Hogan Limited	FS039	LIGHT-REQ3	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS015	LIGHT-REQ3	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS010	LIGHT-REQ3	Support	All submission points to be allowed in full.
DPR-0116	Robert Glassey	011	LIGHT-REQ3	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS040	LIGHT-REQ3	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS016	LIGHT-REQ3	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS011	LIGHT-REQ3	Support	All submission points to be allowed in full.
DPR-0116	Robert Glassey	012	LIGHT-REQ3	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS041	LIGHT-REQ3	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS017	LIGHT-REQ3	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS012	LIGHT-REQ3	Support	All submission points to be allowed in full.
DPR-0353	Horticulture New Zealand	211	LIGHT-REQ3	Oppose In Part	Amend as follows: 7. All non-residential artificial outdoor lighting, excluding <u>primary production</u> and public amenity buildings that require lighting for security and safety purposes shall not operate between 2200 and 0600.
DPR-0372	Dairy Holdings Limited	FS045	LIGHT-REQ3	Support	Accept the submission.
DPR-0388	Craigmore Farming Services Limited	FS013	LIGHT-REQ3	Support	Accept the submission.
DPR-0358	Rolleston West Residential Limited (RWRL)	271	LIGHT-REQ3	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	260	LIGHT-REQ3	Support	Retain as notified

DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	266	LIGHT-REQ3	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	125	LIGHT-REQ3	Support In Part	Amend as follows: <u>Note: This requirement does not apply to roads and public pedestrian accessways and cycleways, which are subject to LIGHT-REQ4.</u>
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	278	LIGHT-REQ3	Support	Retain as notified
DPR-0422	Federated Farmers of New Zealand - North Canterbury	240	LIGHT-REQ3	Oppose In Part	Either delete all zones covered by this requirement, except the West Melton Observatory Lighting Area, or have a permitted rule for rural production activities that reflects the practical, operational needs of a farm.
DPR-0375	Waka Kotahi NZ Transport Agency	FS201	LIGHT-REQ3	Oppose In Part	<i>Council should consider carefully the appropriateness of the relief sought and any permitted activity should be subject to controls regarding light spill, distraction (e.g. flashing lights) and glare onto roads.</i>

Analysis

- 20.3 Lukas Travnicek¹⁰³ is seeking that LIGHT-REQ3 not apply in an ONL. Mr Travnicek is concerned with the impact on Mt White Station, which is a high-country farm which has been in operation for 100 plus years. The submission notes that the PDP includes the Station homestead within an ONL area. Mr Travnicek considers that non-residential lighting between 2200 and 0600 is unrealistic and unsafe on a working farm, especially a remote farm within an ONL.
- 20.4 Hort NZ¹⁰⁴ have a similar concern that rural production will be compromised by LIGHT-REQ3.7 and seek to allow lighting associated with rural production to operate between 2200-0600 within sensitive areas.
- 20.5 Federated Farmers¹⁰⁵ are requesting that all zones except the West Melton Observatory Lighting Area not be subject to LIGHT-REQ3, or that there is a permitted activity rule for rural production activities that reflects the practical and operational needs of a farm.
- 20.6 The rule requirement is mostly problematic for rural producers with respect to LIGHT-REQ3.7 in that a large amount of the District's rural land is covered by ONL's and VAL's, and therefore lit rural production activities operating within ONL's and VAL's would require resource consent for any artificial outdoor lighting in association with rural production between 2200 and 0600. This means that lit rural production activities such as seasonal harvesting, feed pads, wintering barns, milking sheds would require a resource consent if located within an ONL, VAL, CE Overlay or the West Melton Observatory Lighting Area to operate between 2200 and 0600. The key tension being that the ONL and VAL areas in particular are used for rural production and are also some of the naturally darkest in the district and are considered important to protect from sky glow.

¹⁰³ 104.008 Lukas Travnicek

¹⁰⁴ 353.211 Hort NZ

¹⁰⁵ 422.240 Federated Farmers

- 20.7 In the Rural Chapter of the PDP, ‘primary production’ is recognised as being important to the district. Therefore, the importance of rural production to the district and region and the health and safety requirements associated with 24-hour rural production need to be balanced with the sky glow objectives. After further analysis it is agreed that rural production and less so the associated health and safety could potentially be compromised by the current provisions, in that an additional consenting requirement would be imposed on activities which are otherwise enabled in GRUZ. With respect to rural production activity, LIGHT-REQ3.1 which requires the lighting to be directed downward and shielded from above, is considered a sufficient compromise position to both manage sky glow effects from rural production activities and permit such activities to operate at night within ONL’s. To achieve this change, “agricultural, pastoral and horticultural” activities are recommended as being excluded from LIGHT-REQ3.7 (referring to the PDP ‘primary production’ definition was considered too broad), and LIGHT-REQ3.1 can then be relied upon to manage sky glow effects in association with these activities.
- 20.8 It is considered that LIGHT-REQ3.7 otherwise needs to be maintained to ensure significant commercial or industrial lit developments that need to operate 24/7 located within the sensitive areas identified, although more unlikely, would trigger the need for resource consent and an assessment of sky glow effects. It is also of note that consent for such commercial or industrial activity would already be required in the GRUZ in any case. Requiring resource consent in relation to such commercial or industrial activity within the West Melton Observatory Lighting Area and the naturally dark ONL, VAL and CE Overlays also recognises the distinct character and amenity values of these areas which are naturally dark in comparison to developed areas. Therefore, overall, it is recommended that the Lukas Travnicek, Hort NZ and Federated Farmers submission points be accepted in part.
- 20.9 Robert Glassey¹⁰⁶ submitted in support of LIGHT-REQ3. Specifically, Mr Glassey is in support of: the requirement for downward directed and shielded outdoor lights to reduce sky glow (LIGHT-REQ3.1); security lights associated with any residential unit being motion activated as if left running they can be a significant nuisance to night sky observation (LIGHT-REQ3.4); and non-residential artificial outdoor lighting not operating between 2200 and 0600 in an ONL, VAL, CE and West Melton Observatory Lighting Area Overlays (LIGHT-REQ3.7) as this will help control sky glow in relation to the West Melton Observatory and other dark sky areas as townships expand. However, he notes that he cannot find a definition of the observatory zone or other dark sky zones. It is of note that these areas are mapped rather than being defined. Overall, it is recommended that the submission points in relation to LIGHT-REQ3.1 and LIGHT-REQ3.4 be accepted, and that the submission point in relation to LIGHT-REQ3.7 be accepted in part based on the recommended amendment to LIGHT-REQ3.7 as a result of the submissions from Mr Travnicek, Hort NZ and Federated Farmers.
- 20.10 Waka Kotahi¹⁰⁷ are seeking that a note be added to clarify that LIGHT-REQ3 does not apply to roads and public pedestrian accessways and cycleways, which are subject to LIGHT-REQ4. However, this is considered evident as the relevant rule managing road lighting, LIGHT-R2, only links to LIGHT-

¹⁰⁶ 116.010, 116.011, 116.012 Robert Glassey

¹⁰⁷ 375.125 Waka Kotahi

REQ4. Therefore, this amendment is considered unnecessary, and it is recommended that this submission point be rejected.

20.11 RWRL¹⁰⁸, IRHL¹⁰⁹, RIHL¹¹⁰, and RIDL¹¹¹ all seek that LIGHT-REQ3 be retained as notified. It is recommended that these submission points be accepted in part based on the recommended amendment to LIGHT-REQ3.7.

Recommendations and amendments

20.12 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-REQ3.7 as shown in **Appendix 2** to better enable artificial outdoor lighting associated with agricultural, pastoral and horticultural activities within identified sensitive areas.

20.13 The amendments recommended to LIGHT-REQ3.7 are set out in a consolidated manner in **Appendix 2**.

20.14 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

20.15 The scale of change does not require a s32AA evaluation.

21. LIGHT-REQ4

Introduction

21.1 This section responds to the submission points relating to the LIGHT-REQ4 which manages sky glow in relation to roads and public pedestrian accessways and cycleways. The rule requirement has been specifically developed to consider the lighting requirements of both NZTA and the Council.

Submissions

21.2 Six submission points and three further submission points were received in relation to LIGHT-REQ4.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	013	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS042	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS018	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS013	Support	All submission points to be allowed in full.
DPR-0358	Rolleston West Residential Limited (RWRL)	272	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	261	Support	Retain as notified

¹⁰⁸ 358.271 RWRL

¹⁰⁹ 363.260 IRHL

¹¹⁰ 374.266 RIHL

¹¹¹ 384.278 RIDL

DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	267	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	126	Support In Part	Amend as follows: 1. All <u>new</u> artificial outdoor lighting for roads and public pedestrian accessways and cycleways shall: a. Utilise flat glass luminaires; and b. Be directed downward and shielded from above to ensure that all light shines below the horizontal; and c. Have a maximum uplight value of U0; and d. Have the ability to connect to control systems to enable lighting to be turned off or dimmed.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	279	Support	Retain as notified

Analysis

- 21.3 Waka Kotahi¹¹² seek that LIGHT-REQ4.1 have the word “new” inserted so that the rule requirement only applies where new artificial outdoor lighting is installed as much of their older existing lighting stock is not able to meet these requirements and requiring all existing lighting to be upgraded to meet these standards is not reasonable.
- 21.4 It is not considered necessary that the provision specifically refer to “new” lighting as the PDP rules only apply to new development and not existing. LIGHT-R2 and LIGHT-REQ4 applicable to the lighting of roads, including state highways, will only apply to new lighting installations. There is no requirement to upgrade existing lighting to meet the rule and Waka Kotahi have confirmed in their submission and at the time of drafting the proposed provisions that they can meet the rule requirement with respect to new lighting. Therefore, it is recommended that the submission point be rejected.
- 21.5 Robert Glassey¹¹³, RWRL¹¹⁴, IRHL¹¹⁵, RIHL¹¹⁶, and RIDL¹¹⁷ support the provision and seek that it be retained as notified. It is recommended that these submission points be accepted.

Recommendation

- 21.6 I recommend, for the reasons given above, that the Hearings Panel retain LIGHT-REQ4 as notified.
- 21.7 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

22. LIGHT-REQ5

Introduction

- 22.1 This section responds to the submission points relating to the LIGHT-REQ5 which manages sky glow in relation to public sports courts and grounds. The rule requirement has been specifically

¹¹² 375.126 Waka Kotahi

¹¹³ 116.013 Robert Glassey

¹¹⁴ 358.272 RWRL

¹¹⁵ 363.261 IRHL

¹¹⁶ 374.267 RIHL

¹¹⁷ 384.279 RIDL

developed to consider the lighting requirements of public sports courts and grounds, including Council owned reserve land used for sports such as rugby, soccer, netball etc. which requires flood lighting to operate at night, and which is sometimes in close vicinity to residences.

Submissions

22.2 Six submission points and four further submission points were received in relation to LIGHT-REQ5.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	014	Support	Retain as notified.
DPR-0415	Fulton Hogan Limited	FS043	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS019	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS014	Support	All submission points to be allowed in full.
DPR-0345	Porters Alpine Resort	031	Oppose In Part	Amend as follows: LIGHT-REQ5 Sky Glow – Public Sports Courts and Grounds <u>Outdoor Recreation</u>
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS816	Oppose	Reject the submissions
DPR-0358	Rolleston West Residential Limited (RWRL)	273	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	262	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	268	Support	Retain as notified
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	280	Support	Retain as notified

Analysis

22.3 Porters Alpine Resort¹¹⁸ are seeking that the title of LIGHT-REQ5 be amended to delete the reference to “Public Sports Courts and Grounds” and instead refer to “Outdoor Recreation”. As explained in paragraph 15.3-15.5, these provisions have been developed specific to sports courts and grounds and the specifics of the provision is not expected to be suitable for ski field lighting. Lighting at the Porters Ski Field is understood to be bespoke and would either be permitted by LIGHT-R1 or require a restricted discretionary resource consent as it currently does under the ODP. For these reasons it is recommended that this submission point be rejected.

¹¹⁸ 345.031 Porters Alpine Resort

- 22.4 Robert Glassey¹¹⁹, RWRL¹²⁰, IRHL¹²¹, RIHL¹²², and RIDL¹²³ all support the provision and seek that it be retained as notified. It is recommended that these submission points be accepted.

Recommendation

- 22.5 I recommend, for the reasons given above, that the Hearings Panel retain LIGHT-REQ5 as notified.
- 22.6 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

23. LIGHT-MAT1

Introduction

- 23.1 This section responds to the submission points relating to LIGHT-MAT1 Health and Safety and Amenity.

Submissions

- 23.2 Five submission points were received in relation to LIGHT-MAT1.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0358	Rolleston West Residential Limited (RWRL)	274	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	263	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	269	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	127	Support In Part	Amend as follows: 1. Whether the artificial outdoor lighting is necessary to provide for the safe operation of sites <u>and the state highway network</u> , security for buildings and enhance the health, safety, and wellbeing of people.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	281	Support	Retain as notified

Analysis

- 23.3 Waka Kotahi¹²⁴ are seeking that additional wording be inserted to provide for consideration of whether the artificial outdoor lighting is necessary to provide for the safe operation of the state highway network in addition to the operation of sites. Given that LIGHT-REQ1 is now proposed to apply to roads (as per the recommendation at paragraph 8.17), it is recommended that LIGHT-MAT1 also enables consideration of the effects of spill lighting on roads. Waka Kotahi are requesting that

¹¹⁹ 116.014 Robert Glassey

¹²⁰ 35.273 RWRL

¹²¹ 363.262 IRHL

¹²² 374.268 RIHL

¹²³ 384.280 RIDL

¹²⁴ 375.127 Waka Kotahi

the necessity of lighting for the state highway network is considered, but this is not considered necessary as road lighting is permitted by LIGHT-R2 and enabled. Instead, it is considered that LIGHT-MAT1 should be amended to include reference to the effects of light spill creating a distraction or impediment to the safe operation of the land transport network like LIGHT-REQ2 as it applies to glare. Therefore, as the recommended relief is not what Waka Kotahi sought but is still considered to meet their needs and be within scope, it is recommended that the submission point be accepted in part.

23.4 RWRL¹²⁵, IRHL¹²⁶, RIHL¹²⁷ and RIDL¹²⁸ are in support and seek that the provisions be retained as notified. It is recommended that these submission points be accepted in part.

23.5 I recommend, for the reasons given above, that the Hearings Panel:

- b) Amend LIGHT-MAT1 as shown in **Appendix 2** to enable consideration of light spill effects in relation to roads consistent with the proposed amendment to LIGHT-REQ1.

23.6 The amendments recommended to LIGHT-MAT1 are set out in a consolidated manner in **Appendix 2**.

23.7 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

23.8 The scale of change does not require a s32AA evaluation.

24. LIGHT-MAT2

Introduction

24.1 This section responds to the submission points relating to LIGHT-MAT2 Transport Safety.

Submissions

24.2 Five submission points were received in relation to LIGHT-MAT2.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0358	Rolleston West Residential Limited (RWRL)	275	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	264	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	270	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	128	Support In Part	Amend as follows: 1. The actual or potential risk of any glare from artificial outdoor lighting creating a distraction or other

¹²⁵ 358.274 RWRL

¹²⁶ 363.263 IRHL

¹²⁷ 374.269 RIHL

¹²⁸ 384.281 RIDL

				impediment to the safe, <u>effective and efficient</u> operation of the transport network.
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	282	Support	Retain as notified

Analysis

- 24.3 Waka Kotahi¹²⁹ are seeking amendment to recognise that glare also needs to be considered in relation to the impact on the “effective and efficient” operation of the transport network in addition to safe operation. As per LIGHT-P1, I agree with this wording (refer to paragraph 10.6). It is also of note that this wording has been utilised in the proposed addition to LIGHT-MAT1 with respect to light spill. It is also considered preferable to refer to “any road” rather than the “transport network” as ‘transport network’ is not defined and ‘road’ is so it provides greater clarity. This change is within scope of the submission point. Therefore, it is recommended that the submission point be accepted in part.
- 24.4 RWRL¹³⁰, IRHL¹³¹, RIHL¹³² and RIDL¹³³ are in support and seeking the provisions be retained as notified. It is recommended that these submission points be accepted in part.

Recommendations and amendments

- 24.5 I recommend, for the reasons given above, that the Hearings Panel:
- a) Amend LIGHT-MAT2 as shown in **Appendix 2** to provide greater clarity.
- 24.6 The amendments recommended to LIGHT-MAT2 are set out in a consolidated manner in **Appendix 2**.
- 24.7 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.
- 24.8 The scale of change does not require a s32AA evaluation.

25. LIGHT-MAT3

Introduction

- 25.1 This section responds to the submission points relating to LIGHT-MAT3 Sky Glow.

Submissions

- 25.2 Seven submission points and four further submission points were received in relation to LIGHT-MAT3.

Submitter ID	Submitter Name	Submission Point	Position	Decision Requested
DPR-0116	Robert Glassey	015	Support	Retain as notified.

¹²⁹ 375.128 Waka Kotahi

¹³⁰ 358.274 RWRL

¹³¹ 363.263 IRHL

¹³² 374.269 RIHL

¹³³ 384.281 RIDL

DPR-0415	Fulton Hogan Limited	FS044	Oppose	Disallow the submission.
DPR-0460	Marama Te Wai Ltd	FS020	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS015	Support	All submission points to be allowed in full.
DPR-0345	Porters Alpine Resort	032	Oppose In Part	Amend as follows: <u>5. The appropriateness of the lighting to enable people to enjoy night-time outdoor recreation activities that can only be conducted in alpine environments.</u>
DPR-0407	Royal Forest & Bird Protection Society of New Zealand Inc. (Forest & Bird)	FS817	Oppose	Reject the submissions
DPR-0358	Rolleston West Residential Limited (RWRL)	276	Support	Retain as notified
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	265	Support	Retain as notified
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	271	Support	Retain as notified
DPR-0375	Waka Kotahi NZ Transport Agency	129	Support In Part	Amend as follows: <u>5. Whether the sky glow is a consequence of necessary network utility infrastructure, such as road lighting, and the specific situation means that the sky glow is unavoidable in order to provide for the safe, effective and efficient operation of the network utility.</u>
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	283	Support	Retain as notified

Analysis

- 25.3 Both Porters Alpine Resort¹³⁴ and Waka Kotahi¹³⁵ are seeking amendment to LIGHT-MAT3 to allow for consideration of the requirements and benefits of their activities when assessing a resource consent. Both submitters are seeking an additional clause be added specific to their activities to balance the consideration of sky glow effects with the need for their activity to operate how and where it does.
- 25.4 Rather than singling out activities, a new clause like LIGHT-MAT1.1 is preferred as it is more encompassing and is considered to address both submitters relief in principle. It is also considered that there are no instances where sky glow is unavoidable in relation to state highway lighting and therefore the wording sought by Waka Kotahi is too enabling and goes against the proposed objectives and policies relating to managing sky glow. Overall, it is recommended that the Porters Alpine Resort and Waka Kotahi submission points be accepted in part.

¹³⁴ 345.032 Porters Alpine Resort

¹³⁵ 375.129 Waka Kotahi

25.5 Robert Glassey¹³⁶, RWRL¹³⁷, IRHL¹³⁸, RIHL¹³⁹ and RIDL¹⁴⁰ are in support and seek that the provision be retained as notified. Given amendment is recommended to address the Porters Alpine Resort and Waka Kotahi submissions, it is recommended that these submission points be accepted in part.

Recommendations and amendments

25.6 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend LIGHT-MAT3 as shown in **Appendix 2** to enable consideration of the need for lighting and locational constraints when assessing sky glow effects.

25.7 The amendments recommended to LIGHT-MAT3 are set out in a consolidated manner in **Appendix 2**.

25.8 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

25.9 The scale of change does not require a s32AA evaluation.

26. West Melton Observatory Lighting Area

Introduction

26.1 This section responds to the submission points relating to the West Melton Observatory Lighting Area. This area has a 5km radius around the West Melton Observatory within which lighting is more tightly managed in order to protect the ability to view the night sky from the well-established Observatory. This lighting area is in the ODP with the same 5km radius.

Submissions

26.2 Two submission points and six further submission points were received in relation to the West Melton Observatory Lighting Area.

Submitter ID	Submitter Name	Submission Point	Plan Reference	Position	Decision Requested
DPR-0116	Robert Glassey	016	New	Neither Support Nor Oppose	Insert a map of the West Melton Observatory Lighting Area (WMOLA) into the planning maps. The extent of the WMOLA should be set at a 10km radius from the site of the West Melton Observatory (increased from the current 5km in the operative plan).
DPR-0415	Fulton Hogan Limited	FS045	New	Oppose	Disallow the submission.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	FS154	New	Oppose	Disallow the submission point
DPR-0453	Midland Port, Lyttelton	FS036	New	Oppose	Reject

¹³⁶ 116.015 Robert Glassey

¹³⁷ 358.276 RWRL

¹³⁸ 363.265 IRHL

¹³⁹ 374.271 RIHL

¹⁴⁰ 384.283 RIDL

	<i>Company Limited (LPC)</i>				
DPR-0460	Marama Te Wai Ltd	FS021	New	Support	Include the rules as proposed and in particular foster adoption of new LED technologies to do so
DPR-0578	Elene (Helen) Anderson	FS016	New	Support	All submission points to be allowed in full.
DPR-0207	Selwyn District Council	106	New	Support	Insert the West Melton Observatory Lighting Control Area Map and include in the list of Map Tools as the 'West Melton Observatory Lighting Area Overlay' under the General District-Wide Matters tab.
DPR-0578	Elene (Helen) Anderson	FS017	New	Support	Submission point to be allowed in full.

Analysis

- 26.3 Robert Glassey¹⁴¹ is seeking that a map of the area be inserted into the PDP, but that the extent of the area is extended from a 5km to a 10km radius. SDC¹⁴² have also submitted requesting that a map of the area be inserted in the planning maps.
- 26.4 It is agreed with both Robert Glassey and SDC that the West Melton Observatory Lighting Control Area Map needs to be inserted in the PDP to correspond with the provisions, and that the list of Map Tools should include the 'West Melton Observatory Lighting Area Overlay' under the General District-Wide Matters tab. The map had been prepared for inclusion but was mistakenly omitted from the notified PDP.
- 26.5 In response to Robert Glassey's request to increase the radius of the mapped area from 5km to 10km, this was considered as part of the analysis that was undertaken at the time of drafting the provisions in consultation with the CAS.
- 26.6 A Light Baseline Report at section 3.7 states: "The Planning Maps identify the West Melton Observatory Lighting Area (within which the rules apply) as a circular area centred on the observatory at Bells Road, with a radius of 5000m. The size of the area was defined through the hearing process for the District Plan, based on expert evidence provided by a lighting engineer, and in response to submissions from the Canterbury Astronomical Society."¹⁴³
- 26.7 Furthermore, the Preferred Option Report at section 3.4 specifically considered whether the 5km radius should be altered in accordance with International Guidance on sky glow.¹⁴⁴ Following this review and in consultation with the CAS, it was concluded that the radius should remain at 5km. Widening the radius to 10km would cover additional rural (and residential) zoned land without any demonstrated need to minimise sky glow and is not considered necessary, effective or efficient management.
- 26.8 Overall, it is recommended that Robert Glassey's submission point be accepted in part and that the SDC submission point be accepted.

¹⁴¹ 116.016 Robert Glassey

¹⁴² 207.106 SDC

¹⁴³ https://www.selwyn.govt.nz/__data/assets/pdf_file/0005/253589/2.-Appendix-1-lighting-and-glare-provisions_final-Stantec.pdf

¹⁴⁴ https://www.selwyn.govt.nz/__data/assets/pdf_file/0004/265747/Endorsed-Lighting-and-Glare_Preferred-Option-Report_final-draft.pdf

Recommendations and amendments

26.9 I recommend, for the reasons given above, that the Hearings Panel:

- a) Amend the Planning Maps by inserting the West Melton Observatory Lighting Control Area Map and include in the list of Map Tools as the 'West Melton Observatory Lighting Area Overlay' under the General District-Wide Matters tab.
- b) Amend the Planning Maps as shown in **Appendix 2** to ensure that the West Melton Observatory Lighting Area is spatially mapped so it is clear to what extent the corresponding provisions apply.

26.10 The amendments recommended to the planning maps are set out in a consolidated manner in **Appendix 2**.

26.11 It is recommended that submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

26.12 The scale of change does not require a s32AA evaluation.

27. New Policy & Rules - Rural Production and Activity

Introduction

27.1 This section responds to those submission points seeking new policy and rules concerning rural activities.

Submissions

27.2 Three submission points and six further submission points were received.

Submitter ID	Submitter Name	Submission Point	Plan Reference	Position	Decision Requested
DPR-0255	Robert B Glassey	001	New	Neither Support Nor Oppose	Amend LIGHT policy and rules to address flashing lights from irrigators where they impact on adjoining properties and to the roading network, and to help restore the natural nightscape of the Canterbury Plains.
DPR-0301	Upper Waimakariri/Rakaia Group (UWRG)	FS034	New	Support In Part	Allow in part
DPR-0372	Dairy Holdings Limited	FS026	New	Oppose	Reject the submission.
DPR-0388	Craigmore Farming Services Limited	FS003	New	Oppose	Reject the submission.
DPR-0415	Fulton Hogan Limited	FS046	New	Oppose	Disallow the submission.
DPR-0422	Federated Farmers of New Zealand - North Canterbury	238	New	Neither Support Nor Oppose	Insert a new policy that recognises and enables certain rural and primary activities may require artificial outdoor lighting outside normal working hours, under certain conditions, in order for its rural community to thrive in the District.
DPR-0372	Dairy Holdings Limited	FS065	New	Support	Accept the submission.

DPR-0422	Federated Farmers of New Zealand - North Canterbury	239	New	Neither Support Nor Oppose	Insert new rule to permit normal farming operations for peak seasonal work.
DPR-0375	Waka Kotahi NZ Transport Agency	FS170	New	Oppose In Part	<i>Council should consider carefully the appropriateness of the proposed permitted activity and any permitted activity should be subject to controls regarding light spill and glare onto roads.</i>

Analysis

- 27.3 Robert B Glassey¹⁴⁵ is requesting provisions to manage flashing lights associated with irrigators. The submitter is correct in their statement that irrigators can have lighting attached. It is understood that this lighting is optional, ranges in intensity and is minor in nature. At this stage there is no evidence to show the need for provisions to manage such lighting; however, if Mr Glassey wishes to produce evidence which suggests otherwise then potential amendments could be considered further. Therefore, it is recommended that this submission point be rejected.
- 27.4 Federated Farmers¹⁴⁶ are seeking that a new policy is inserted to recognise and enable certain rural and primary activities which may require lighting outside normal working hours. The health and safety of people is already recognised in the policy and it is not considered necessary to single out any activity and specifically provide for it in policy where it is already generally enabled. Therefore, it is recommended that this submission point be rejected.
- 27.5 Federated Farmers¹⁴⁷ are also seeking that a new rule be added to permit normal farming operations for peak seasonal work. It is unclear from the submission what normal farming operations in peak season are unduly impacted by the provisions and how much of an issue it is. If Federated Farmers can provide evidence about which provisions are unduly onerous or where there are gaps in the provisions from their perspective, potential amendments could be considered further. It is of note that greater leniency is now recommended in relation to LIGHT-REQ3.7 with respect to agricultural, pastoral and horticultural activity. Therefore, it is recommended that this submission point be rejected.

Recommendations and amendments

- 27.6 I recommend, for the reasons given above, that the Hearings Panel retain the Light Chapter as notified.
- 27.7 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

28. Non-Notification Clauses

Introduction

¹⁴⁵ 255.001 Robert B Glassey

¹⁴⁶ 422.238 Federated Farmers

¹⁴⁷ 422.239 Federated Farmers

28.1 This section responds to the submission points relating to the addition of non-notification clauses in relation to all controlled and restricted discretionary activities.

Submissions

28.2 Four submission points and 29 further submission points were received.

Submitter ID	Submitter Name	Submission Point	Plan Reference	Position	Decision Requested
DPR-0358	Rolleston West Residential Limited (RWRL)	417	Non-notification clauses	Oppose	Insert the following words, or words to the like effect, to all controlled and restricted discretionary activity rules: <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u>
DPR-0032	Christchurch City Council	FS203	Non-notification clauses	Oppose In Part	<i>Do not limit notification where neighbouring properties, communities, or the wider district are potentially directly affected and the adverse effects are potentially more than minor or where the Act requires notification.</i>
DPR-0298	Trices Road Re-zoning Group	FS934	Non-notification clauses	Support	Accept submission
DPR-0371	Christchurch International Airport Limited (CIAL)	FS055	Non-notification clauses	Support In Part	Accept in part
DPR-0375	Waka Kotahi NZ Transport Agency	FS345	Non-notification clauses	Oppose	Retain relevant provisions without a non-notification clause.
DPR-0414	Kāinga Ora - Homes & Communities	FS128	Non-notification clauses	Support	Not Specified
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS055	Non-notification clauses	Support In Part	Accept in part
DPR-0456	Four Stars Development & Gould Developments Ltd	FS024	Non-notification clauses	Support	Accept submission
DPR-0363	Iport Rolleston Holdings Limited (IRHL)	437	Non-notification clauses	Oppose	Insert the following words, or words to the like effect, to all controlled and restricted discretionary activity rules: <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u>
DPR-0032	Christchurch City Council	FS232	Non-notification clauses	Oppose In Part	<i>Do not limit notification where neighbouring properties, communities, or the wider district are potentially directly affected and the adverse effects are potentially more than minor or where the Act requires notification.</i>

DPR-0298	Trices Road Re-zoning Group	FS963	Non-notification clauses	Support	Accept submission
DPR-0371	Christchurch International Airport Limited (CIAL)	FS153	Non-notification clauses	Support In Part	Accept in part
DPR-0375	Waka Kotahi NZ Transport Agency	FS346	Non-notification clauses	Oppose	Retain relevant provisions without a non-notification clause.
DPR-0414	Kāinga Ora - Homes & Communities	FS157	Non-notification clauses	Support	Not Specified
DPR-0422	Federated Farmers of New Zealand - North Canterbury	FS210	Non-notification clauses	Support In Part	Allow the submission on controlled activity. Disallow the submission point that notification is not required for all restricted discretionary applications.
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS151	Non-notification clauses	Support In Part	Accept in part
DPR-0456	Four Stars Development & Gould Developments Ltd	FS053	Non-notification clauses	Support	Accept submission
DPR-0374	Rolleston Industrial Holdings Limited (RIHL)	483	Non-notification clauses	Oppose	Insert the following words, or words to the like effect, to all controlled and restricted discretionary activity rules: <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u>
DPR-0032	Christchurch City Council	FS270	Non-notification clauses	Oppose In Part	Do not limit notification where neighbouring properties, communities, or the wider district are potentially directly affected and the adverse effects are potentially more than minor or where the Act requires notification.
DPR-0298	Trices Road Re-zoning Group	FS997	Non-notification clauses	Support	Accept submission
DPR-0371	Christchurch International Airport Limited (CIAL)	FS084	Non-notification clauses	Support In Part	Accept in part
DPR-0375	Waka Kotahi NZ Transport Agency	FS347	Non-notification clauses	Oppose	Retain relevant provisions without a non-notification clause.
DPR-0414	Kāinga Ora - Homes & Communities	FS191	Non-notification clauses	Support	Not Specified
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS084	Non-notification clauses	Support In Part	Accept in part

DPR-0456	Four Stars Development & Gould Developments Ltd	FS087	Non-notification clauses	Support	Accept submission
DPR-0384	Rolleston Industrial Developments Limited (RIDL)	516	Non-notification clauses	Oppose	Insert the following words, or words to the like effect, to all controlled and restricted discretionary activity rules: <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u>
DPR-0032	Christchurch City Council	FS305	Non-notification clauses	Oppose In Part	Do not limit notification where neighbouring properties, communities, or the wider district are potentially directly affected and the adverse effects are potentially more than minor or where the Act requires notification.
DPR-0298	Trices Road Re-zoning Group	FS1024	Non-notification clauses	Support	Accept submission
DPR-0371	Christchurch International Airport Limited (CIAL)	FS117	Non-notification clauses	Support In Part	Accept in part
DPR-0375	Waka Kotahi NZ Transport Agency	FS348	Non-notification clauses	Oppose	Retain relevant provisions without a non-notification clause.
DPR-0414	Kāinga Ora - Homes & Communities	FS225	Non-notification clauses	Support	Not Specified
DPR-0453	Midland Port, Lyttelton Port Company Limited (LPC)	FS117	Non-notification clauses	Support In Part	Accept in part
DPR-0456	Four Stars Development & Gould Developments Ltd	FS121	Non-notification clauses	Support	Accept the submission

Analysis

- 28.3 All the activities within the Light Chapter are restricted discretionary where rule requirements are not met. It is considered that in association with each of these activities there is the potential for adverse effects to potentially be more than minor and for neighbouring properties, communities, or the wider district to be potentially directly affected. Therefore, non-notification clauses in the Light Chapter are not supported and it is recommended that these submission points be rejected.

Recommendation

- 28.4 I recommend, for the reasons given above, that the Hearings Panel retain the Light Chapter as notified with respect to non-notification clauses.
- 28.5 It is recommended that submissions and further submissions are either accepted, accepted in part or rejected as shown in **Appendix 1**.

29. Conclusion

- 29.1 For the reasons included throughout this report, I consider that the amended provisions will be efficient and effective in achieving the purpose of the RMA, the relevant objectives of this plan and other relevant statutory documents.