

Wellington City Proposed District Plan

Hearing Stream 7 – LIGHT Chapter

Section 42A of the Resource Management Act 1991

Document Information

REPORT FOR:	Independent Hearings Commissioners: Trevor Robinson (Chair) Liz Burge David McMahon Robert Schofield
SUBJECT:	Wellington City Proposed District Plan – LIGHT Report
PREPARED BY:	Hayden Beavis
REPORT DATED:	20/02/2024
DATE OF HEARING:	19/03/2024

Executive Summary

- i. This report considers submissions received by Wellington City Council in relation to the relevant objectives, policies, rules, definitions, appendices and maps of the Wellington City Proposed District Plan as they apply to the LIGHT chapter.
- ii. There were a number of submissions and further submissions received on the LIGHT chapter. The submissions received were diverse and sought a range of outcomes. The report outlines recommendations in response to the issues that have emerged from these submissions.
- iii. The following are considered to be the key issues in contention in the [Topic] chapter:
 - a. Outdoor artificial lighting and aviation safety; and
 - b. Impacts of lighting on indigenous biodiversity.
- iv. This report addresses each of these key issues, as well as any other relevant issues raised in the submissions.
- v. The report includes recommendations to address matters raised in submissions as to whether the provisions in the Proposed District Plan relating to LIGHT should be retained as notified, amended, or deleted in full. These recommendations are summarised below:
 - a. The light chapter is largely retained as notified;
 - b. Minor wording amendments have been added; and
- vi. Appendix A of this report sets out the recommended changes to the LIGHT chapter in full. These recommendations take into account the relevant matters raised in submissions and relevant statutory and non-statutory documents.
- vii. The LIGHT chapter is also subject to a number of consequential amendments arising from submissions to the whole of the Proposed District Plan and other chapters.
- viii. For the reasons set out in the Section 32AA evaluation included throughout this report, the proposed objectives and associated provisions, with the recommended amendments, are considered to be the most appropriate means to:
 - a. Achieve the purpose of the Resource Management Act 1991 (RMA) where it is necessary to revert to Part 2 and otherwise give effect to higher order planning documents, in respect to the proposed objectives; and
 - b. Achieve the relevant objectives of the Proposed District Plan, in respect to the proposed provisions.

Contents

Document Information.....	2
Executive Summary.....	3
Contents	4
Interpretation	6
1.0 Introduction	8
1.1 Purpose.....	8
1.2 Author and Qualifications	8
1.3 Supporting Evidence.....	9
1.4 Key resource management issues in contention	9
1.5 Procedural Matters.....	9
2.0 Background and Statutory Considerations.....	10
2.1 Resource Management Act 1991.....	10
2.2 Schedule 1 and ISPP.....	10
2.3 Section 32AA.....	10
2.4 Trade Competition.....	11
3.0 Consideration of Submissions and Further Submissions.....	11
3.1 Overview.....	11
3.1.1 Report Structure	11
3.1.2 Format for Consideration of Submissions	12
3.2 General Submissions.....	12
3.2.1 Matters raised by submitters	12
3.2.2 Assessment	12
3.2.3 Summary of recommendations	14
3.3 LIGHT-O2 – Adverse effects of outdoor lighting	14
3.3.1 Matters raised by submitters	14
3.3.2 Assessment	14
3.3.3 Summary of recommendations	14
3.4 LIGHT-P2 – Design and location of outdoor artificial lighting	14
3.4.1 Matters raised by submitters	14
3.4.2 Assessment	15
3.4.3 Summary of recommendations	16
3.5 LIGHT-R1 – Outdoor artificial lighting	16
3.5.1 Matters raised by submitters	16
3.5.2 Assessment	16
3.5.3 Summary of recommendations	17

3.6	LIGHT-R2 – Outdoor artificial lighting in the coastal margin.....	17
3.6.1	Matters raised by submitters	17
3.6.2	Assessment	18
3.6.3	Summary of recommendations	19
3.7	LIGHT – New Rules	19
3.7.1	Matters raised by submitters	19
3.7.2	Assessment	19
3.7.3	Summary of recommendations	19
3.8	LIGHT-S1 – Measurement methods	19
3.8.1	Matters raised by submitters	19
3.8.2	Assessment	19
3.8.3	Summary of recommendations	20
3.9	LIGHT-S2 – Light spill	20
3.9.1	Matters raised by submitters	20
3.9.2	Assessment	21
3.9.3	Summary of recommendations	22
3.10	LIGHT-S3 – Glare.....	22
3.10.1	Matters raised by submitters	22
3.10.2	Assessment	23
3.10.3	Summary of recommendations	23
3.11	LIGHT-S4 – Effects on road users	24
3.11.1	Matters raised by submitters	24
3.11.2	Assessment	24
3.11.3	Summary of recommendations	24
3.12	LIGHT-S6 – Externally illuminated surfaces.....	25
3.12.1	Matters raised by submitters	25
3.12.2	Assessment	25
3.12.3	Summary of recommendations	26
4.0	Minor and inconsequential amendments.....	27
5.0	Conclusion	27
5.1	Recommendations.....	27
6.0	Appendix A: Recommended Amendments to the LIGHT Chapter.....	28
6.1	Appendix B: Recommended Responses to Submissions and Further Submissions on LIGHT Chapter.....	29
6.2	Appendix C: Statement of Evidence of Glen Andrew Wright on behalf of Wellington City Council .	30

Interpretation

Table 1: Abbreviations

Abbreviation	Means
the Act / the RMA	Resource Management Act 1991
the Enabling Act	Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021
the Council	Wellington City Council
the Operative Plan/ODP	Operative Wellington City District Plan
the Proposed Plan/PDP	Proposed Wellington City District Plan
GWRC	Greater Wellington Regional Council
NES	National Environmental Standard
NES-AQ	National Environmental Standards for Air Quality 2004
NES-CS	National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011
NES-ETA	National Environmental Standards for Electricity Transmission Activities 2009
NES-FW	National Environmental Standards for Freshwater 2020
NES-MA	National Environmental Standards for Marine Aquaculture 2020
NES-PF	National Environmental Standards for Plantation Forestry 2017
NES--SDW	National Environmental Standards for Sources of Drinking Water 2007
NESTF	National Environmental Standards for Telecommunication Facilities 2016
NPS	National Policy Statement
NPS-ET	National Policy Statement on Electricity Transmission 2008
NPS-FM	National Policy Statement for Freshwater Management 2020
NPS-IB	National Policy Statement for Indigenous Biodiversity 2023
NPS-UD	National Policy Statement on Urban Development 2020
NPS-REG	National Policy Statement for Renewable Electricity Generation 2011
NZCPS	New Zealand Coastal Policy Statement 2010
PNRP	Proposed Wellington Natural Resources Plan (Decisions Version) 2019
RPS	Wellington Regional Policy Statement 2013
Spatial Plan	Spatial Plan for Wellington City 2021
S32	Section 32 of the Resource Management Act 1991
S32AA	Section 32AA of the Resource Management Act 1991

Table 2: Abbreviations of Submitters' Names

Abbreviation	Means
Dept of Corrections	Ara Poutama Aotearoa the Department of Corrections
DOC	Department of Conservation Te Papa Atawhai
FENZ	Fire and Emergency New Zealand
Foodstuffs	Foodstuffs North Island Limited
Forest and Bird	Royal Forest and Bird Protection Society
GWRC	Greater Wellington Regional Council
Harvey Norman	Harvey Norman Properties (N.Z.) Limited
Heritage NZ	Heritage New Zealand Pouhere Taonga
House Movers Association	House Movers section of the New Zealand Heavy Haulage Association Inc
KiwiRail	KiwiRail Holdings Limited
NZDF	New Zealand Defence Force
Oil companies	Z Energy, BP Oil NZ Ltd and Mobil Oil NZ Limited
Oranga Tamariki	Oranga Tamariki – Ministry of Children
QEII	Queen Elizabeth the Second National Trust
RNZ	Radio New Zealand
Survey+Spatial	Survey+Spatial New Zealand (Wellington Branch)
Telco	Spark New Zealand Trading Limited, Chorus New Zealand Limited, Vodafone New Zealand Limited
Transpower	Transpower New Zealand Ltd
TROTR	Te Rūnanga o Toa Rangatira
Waka Kotahi	Waka Kotahi NZ Transport Agency
WE	Wellington Electricity Lines Limited
Woolworths	Woolworths New Zealand Limited

In addition, references to submissions includes further submissions, unless otherwise stated.

1.0 Introduction

1.1 Purpose

1. This report is prepared under section 42A of the Resource Management Act 1991 (the **RMA**) to:
 - a. Assist the Hearings Panel in their role as Independent Commissioners in making their recommendations on the submissions and further submissions on the Wellington City Proposed District Plan (the **PDP**); and
 - b. Provide submitters with information on how their submissions have been evaluated and the recommendations made by officers, prior to the hearing.
2. This report considers submissions received by the Council in relation to the relevant objectives, policies, rules and definitions as they apply to the LIGHT chapter in the PDP.
3. This report discusses general issues, the original and further submissions received following notification of the PDP, makes recommendations as to whether or not those submissions should be accepted or rejected, and concludes with a recommendation for changes to the PDP provisions or maps based on the assessment and evaluation contained in the report.
4. This report is intended to be read in conjunction with the Section 42A Assessment Report: Part A – Overview, which sets out the statutory context, background information and administrative matters pertaining to the District Plan review and PDP.
5. Any other relevant parts of the PDP will be addressed in this report as necessary.
6. The Hearings Panel may choose to accept or reject the conclusions and recommendations of this report, or may come to different conclusions and make different recommendations, based on the information and evidence provided to them by submitters.

1.2 Author and Qualifications

7. My full name is Hayden Callum Beavis. I am a Planning Advisor in the District Plan Team at Wellington City Council (the Council).
8. My role in preparing this report is that of an expert in planning.
9. I hold the qualification of Bachelor of Laws from Victoria University of Wellington. I am an Associate Member of the New Zealand Planning Institute.
10. I have 20 months experience in planning and resource management. I have experience working in Local Government for Long Term and Annual Planning processes.
11. Since joining the District Plan Team in July 2022 I have been involved with the submissions and further submissions process, as well as varying degrees of input across many chapters notified under the ISPP process. Of particular note I had significant input into the Viewshafts, Commercial Zone, Subdivision and Noise chapters.
12. I am also the reporting officer on the Temporary Activities and Viewshafts chapter.
13. Although this is a Council Hearing, I have read the Code of Conduct for Expert Witnesses contained in the Practice Note issued by the Environment Court, which came into effect on 1 January 2023. I have complied with the Code of Conduct when preparing my written statement

of evidence and I agree to comply with it when I give any oral evidence.

14. Other than when I state that I am relying on the evidence or advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
15. Any data, information, facts, and assumptions I have considered in forming my opinions are set out in the part of the evidence in which I express my opinions. Where I have set out opinions in my evidence, I have given reasons for those opinions.

1.3 Supporting Evidence

16. The expert evidence, literature, legal cases or other material which I have used or relied upon in support of the opinions expressed in this report is as follows:
 - a. Appendix C - Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council (Lighting).

1.4 Key resource management issues in contention

17. 43 submission points and 42 further submission points were received on the provisions relating to this topic.
18. Key topics arising in the submissions and further submissions were:
 - a. Aircraft safety from lighting sources.
 - b. Light into neighboring significant natural areas.
 - c. Lighting standards.
19. Having read the submissions and further submissions, I consider that the following matters are the key issues in contention in the chapter:
 - a. Aviation safety

1.5 Procedural Matters

20. At the time of writing this report there have not been any pre-hearing conferences, clause 8AA meetings or expert witness conferencing in relation to submissions on LIGHT chapter.
21. There are not considered to be any other procedural matters to note.

2.0 Background and Statutory Considerations

2.1 Resource Management Act 1991

22. The PDP has been prepared in accordance with the RMA and in particular, the requirements of:
- Section 74 Matters to be considered by territorial authority, and
 - Section 75 Contents of district plans.
23. As set out in Section 32 Evaluation Report Part 1 – Context to Evaluation and Strategic Objectives, 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 and a comprehensive assessment of all relevant consultation and statutory considerations prior to public notification of the PDP are discussed in detail within the Section 32 Evaluation Report for LIGHT.

2.2 Schedule 1 and ISPP

24. As detailed earlier in the section 42A Overview Report, the Council has chosen to use two plan review processes:
- a. The Intensification Streamlined Planning Process (ISPP) under Part 6 of Schedule 1 of the RMA for the intensification planning instrument (IPI). There are no appeal rights on ISPP provisions.
 - b. For all other PDP provisions and content, Part 1 of Schedule 1 process is used. Part 1 Schedule 1 provisions can be appealed.
25. For this topic, all provisions fall under the Part 1 Schedule 1 process.

2.3 Section 32AA

26. I have undertaken an evaluation of the recommended amendments to provisions since the initial section 32 evaluation was undertaken in accordance with s32AA. Section 32AA states:

32AA Requirements for undertaking and publishing further evaluations

(1) A further evaluation required under this Act—

(a) is required only for any changes that have been made to, or are proposed for, the proposal since the evaluation report for the proposal was completed (the changes); and

(b) must be undertaken in accordance with section 32(1) to (4); and

(c) must, despite paragraph (b) and section 32(1)(c), be undertaken at a level of detail that corresponds to the scale and significance of the changes; and

(d) must—

(i) be published in an evaluation report that is made available for public inspection at the same time as the approved proposal (in the case of a national policy statement or a New Zealand coastal policy statement or a national planning standard), or the decision on the proposal, is notified; or

(ii) be referred to in the decision-making record in sufficient detail to demonstrate that the further evaluation was undertaken in accordance with this section.

(2) To avoid doubt, an evaluation report does not have to be prepared if a further evaluation is undertaken in accordance with subsection (1)(d)(ii).

27. The required section 32AA evaluation for changes proposed as a result of consideration of submissions with respect to this topic is contained within the assessment of the relief sought in submissions in section 3 of this report, as required by s32AA(1)(d)(ii).
28. The Section 32AA further evaluation contains a level of detail that corresponds to the scale and significance of the anticipated effects of the changes that have been made. Recommendations on editorial, minor, and consequential changes that improve the effectiveness of provisions without changing the policy approach are not re-evaluated. No re-evaluation has been undertaken if the amendments have not altered the policy approach.

2.4 Trade Competition

29. Trade competition is not considered relevant to the provisions of the PDP relating to this topic.
30. There are no known trade competition issues raised within the submissions.

3.0 Consideration of Submissions and Further Submissions

3.1 Overview

31. There were 8 submitters who collectively made 43 submission points on this topic.
32. There were 4 further submitters who collectively made 42 further submission points.

3.1.1 Report Structure

33. Submissions on this topic raised a number of issues that have been grouped into sub-topics within this report. Some of the submissions are addressed under a number of topic headings based on the topics contained in the submission. I have considered substantive commentary on primary submissions contained in further submissions as part of my consideration of the primary submissions to which they relate.
34. In accordance with Clause 10(3) of the First Schedule of the RMA, I have undertaken the following evaluation on both an issues and provisions-based approach, as opposed to a submission-by-submission approach. I have organised the evaluation in accordance with the layout of chapters of the PDP as notified.
35. Recommended amendments are contained in the following appendices:
 - a. Appendix A – Recommended Amendments to the LIGHT Chapter
36. Additional information can also be obtained from the Summary of Submissions LIGHT Chapter, the associated LIGHT Section 32 Report, and the overlays and maps on the ePlan.
37. The following evaluation should be read in conjunction with the summaries of submissions and further submissions, and the submissions themselves. Where I agree with the relief sought and the rationale for that relief, I have noted my agreement, and my recommendation is provided

in the summary of submission table in Appendix B. Where I have undertaken further evaluation of the relief sought in a submission(s), the evaluation and recommendations are set out in the body of this report. I have provided a marked-up version of the LIGHT Chapter with recommended amendments in response to submissions as Appendix A.

3.1.2 Format for Consideration of Submissions

38. For each identified topic, the consideration of submissions has been undertaken in the following format:
 - Matters raised by submitters;
 - Assessment; and
 - Summary of recommendations.
39. The recommended amendments to the relevant parts of the PDP are set out in Appendix A of this report where all text changes are shown in a consolidated manner.

3.2 General Submissions

3.2.1 Matters raised by submitters

40. Bruce Crothers [319.14] noted Light Pollution rules in Rural Areas in their submission.
41. WIAL [406.387] (Supported by Guardians of the Bays Inc [FS44.37] and BARNZ [FS139.78]) seek that the LIGHT chapter is amended to add protection for aircraft from poorly managed lighting.
42. Restaurant Brands Limited [349.33], Living Streets Aotearoa [482.45] and WIAL [406.385, 406.386] (Supported by further submissions from Guardians of the Bays Inc [FS44.35, FS44.36] and BARNZ [FS139.76, 139.77]) seek that the LIGHT – Te Aho - chapter is retained as notified.
43. Catherine Underwood [481.19] seeks that more specific rules around lighting be present in the Proposed District Plan.
44. Catherine Underwood [481.20] seeks that the LIGHT chapter adhere to the lighting recommendations from International Dark Sky Association
45. Retirement Villages Association of New Zealand (RVA) [350.69, 350.70, 350.73, 350.74] oppose many LIGHT provisions and seek to amend standards that provide for reasonable outdoor lighting as a permitted activity without overly onerous compliance requirements.

3.2.2 Assessment

46. In response to Bruce Crothers [319.14], it is unclear what outcome is sought from the submission. I note that to achieve permitted activity status for Outdoor Artificial Lighting under LIGHT-R1, compliance with LIGHT-S5 – Sky Glow – is required. LIGHT-S5 addresses all zones but the standard is most restrictive in the General Rural Zone, Large Lot Residential Zone and Future Urban Zone – only allowing an upward light ratio of 1% from outdoor artificial lighting. Visual observation of the night sky is an assessment criterion where this standard is infringed. The Sky Glow standards are taken as recommended from AS/NZS 4282:2019 and I am confident that these are sufficient to limit light pollution in the General Rural Zone.
47. I acknowledge the submission point from WIAL [406.387] (Supported by Guardians of the Bays Inc [FS44.37] and BARNZ [FS139.78]), noting that this submission point is generally addressed by

my responses to WIAL's submissions on specific LIGHT provisions in this report.

48. I acknowledge the submission points from Restaurant Brands Limited [349.33] and WIAL [406.385, 406.386], and accept them in part because I have recommended amendments to the chapter.
49. In response to Catherine Underwood [481.19], the PDP aligns with *Australian/New Zealand Standard 4282:2019 Control of the obtrusive effects of outdoor lighting*, which was recently updated in 2019 and again in 2023. Many recent plan changes that cover lighting provisions align with these standards to some degree. The WCC PDP goes above and beyond many of the recent plan changes that address lighting by adopting 6 different performance standards for lighting to achieve the objectives of the chapter – measurement methods, light spill, glare, effects on road users, sky glow and externally illuminated surfaces. Porirua City Council PDP has a similar series of standards and regional consistency to the extent practicable is desired.
50. In response to Catherine Underwood [481.20], the PDP has a Sky Glow standard (LIGHT-S5). This is taken from AS/NZS 4282:2019 recommendations for the zone equivalents to what the PDP has. This provides either 1%, 2% or 3% Upward Light Ratio depending on the zone with higher allowances generally for denser zones. These represent a marked decrease in the amount of permitted light going above the horizontal plane from the ODP already.
51. As noted by Mr Wright at paragraphs 22 – 26 in his statement of evidence¹, the PDP could go further in improving the quality of the night sky through methods such as restrictions on types of light fittings, tighter upward light ratios, light source colour of 2700K or lower and adaptive controls such as automatic daylight control and motion detection. However due to the appreciable increase in restrictions and costs for artificial lighting, as well as the requirement to educate the public, electricians and local lighting suppliers to provide compliant lighting, it would be a large burden on plan users.
52. In addition to this, this would only apply to any new outdoor artificial lighting installations moving forward. Whilst over time this would improve the quality of the night sky, it is unlikely that the night sky would be improved to the point that Wellington City meets the requirements for International Dark Sky Association status. No Section 32AA analysis has been provided to assess this proposal. The small gains in night sky quality attained through these amendments do not outweigh restrictions, costs and burden on plan users as outlined by Mr Wright.
53. In response to Retirement Villages Association of New Zealand (RVA) [350.69, 350.70, 350.73, 350.74], I disagree in general. The LIGHT chapter standards have been adopted from *Australian/New Zealand Standard 4282:2019* (Noting that it is updated in 2023, but the limits from the 2019 standard used in the PDP were retained in the 2023 version) which represents current best practice for lighting provisions for district plans.
54. I appreciate that technical standards can be difficult to understand. However, lighting is an inherently technical topic and I do not think complicated standards can be avoided when developing standards that limit adverse effects of outdoor artificial lighting. AS/NZS 4282:2019 provides explanatory notes on what the measurement types represent to help comprehension but ultimately a suitably qualified professional with professional equipment is likely needed to measure and confirm whether the standards within the chapter are met. The WCC PDP is not unique in this respect, as most district plans that address outdoor artificial lighting have some degree of technical lighting standards.
55. Mr Wright notes in paragraphs 28 – 29 of his statement of evidence² that the standards

¹ Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council (Lighting)

² Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council (Lighting), paragraphs 28 - 29

provided in the PDP are necessary to control obtrusive effects of lighting. It is also noted that with appropriate light fitting selections and locations, the majority of artificial lighting can be installed without technical input – and that it is only where more intensive lighting is being installed that extensive technical input is required, with this input ensuring effects are appropriately controlled while providing the lighting required for an activity.

3.2.3 Summary of recommendations

- 56. HS7-LIGHT-Rec1: No changes are recommended in response to general submissions.
- 57. HS7-LIGHT-Rec2: That submission points relating to general submissions are accepted/rejected as detailed in Appendix B.

3.3 LIGHT-O2 – Adverse effects of outdoor lighting

3.3.1 Matters raised by submitters

- 58. The Director-General of Conservation [385.77, 385.78] supports LIGHT-O2 in part, but seeks that the provision is amended as follows:

LIGHT-O2	<p>Adverse effects of outdoor artificial lighting</p> <p>The adverse effects of outdoor artificial lighting on sensitive activities, traffic safety, aviation safety, coastal wildlife, <u>indigenous fauna</u>, and the night sky are limited.</p>
-----------------	--

- 59. Ministry of Education [400.76] seeks that LIGHT-O2 (Adverse effects of outdoor lighting) is retained as notified.

3.3.2 Assessment

- 60. In response to Director-General of Conservation [385.77, 385.78], I reject this submission point and point to my assessment at paragraphs 88 – 89.

3.3.3 Summary of recommendations

- 61. HS7-LIGHT-Rec3: No changes are recommended in response to submissions on LIGHT-O2.
- 62. HS7-LIGHT-Rec4: That submission points relating to submissions on LIGHT-O2 are accepted/rejected as detailed in Appendix B.

3.4 LIGHT-P2 – Design and location of outdoor artificial lighting

3.4.1 Matters raised by submitters

- 63. The Director-General of Conservation [385.79, 385.80] supports LIGHT-P2 (Design and location of outdoor lighting) and seeks an amendment, as follows:

LIGHT-P2	<p>Design and location of outdoor artificial lighting</p> <p>Require outdoor artificial lighting to be designed, located and oriented to maintain amenity values, traffic safety, aviation safety and to minimise effects on wildlife in coastal margins <u>and indigenous fauna in any other location.</u></p>
-----------------	--

64. WIAL [406.389, 406.390, 406.391] (Supported by BARNZ [FS139.80, FS139.81, FS139.82] and Guardians of the Bays Inc [FS44.39, FS44.40, FS44.41]) opposes LIGHT-P2 (Design and location of outdoor lighting) and seeks to either delete the provision, or provide an amendment as follows:

LIGHT-P2	<p>Design and location of outdoor artificial lighting</p> <p>Require outdoor artificial lighting to be designed, located and oriented to maintain amenity values, traffic safety, aviation safety and to minimise effects on wildlife in coastal margins;-</p> <ul style="list-style-type: none"> a. <u>Maintain amenity values;</u> b. <u>Maintain traffic safety;</u> c. <u>Avoid adverse effects on aviation safety; and</u> d. <u>To minimise effects on wildlife in coastal margins.</u>
-----------------	---

3.4.2 Assessment

65. In response to The Director-General of Conservation [385.79, 385.80], I reject this submission and I refer to my assessment at paragraph 88 – 89.
66. In response to WIAL [406.389, 406.390, 406.391], I disagree with a strict avoid wording of this policy.
67. WIAL noted in submission³ that the lighting standards will generally avoid the establishment of lighting and/or glare effects that could give rise to adverse effects on aircraft safety and subsequently supports the assessment criteria within S3, S4 and S5 that seeks to ensure the safe and efficient functioning of the airport is considered.
68. The submitted “Avoid” framing of the LIGHT-P2 is a stronger policy direction which is not reflected in the rule framework. Avoid policies generally seek to prevent an activity or avoid adverse effects except where there are special circumstances, and/or the effects are minor, and the chapter is more permissive of outdoor artificial lighting. The submission does not identify specific lighting activities that should be avoided in terms of aviation safety.
69. All of the standards except LIGHT-S4 – *Effects on Road Users* – include assessment criteria “*The*

³ Paragraph 4.101 of Submission of Wellington International Airport Limited on the Proposed District Plan.

impact of lighting on aircraft safety or the safe and efficient functioning of the Airport". Given that the standards need to be complied with for permitted activity status in both R1.1 and restricted discretionary status in R2.1, and the standards will generally avoid adverse effects, and where these standards are breached the assessment criteria considers the effects on aviation safety, I do not consider a stronger policy direction is necessary. I therefore recommend retaining the term "Maintain", and consider that through both the permitted activity and restricted discretionary pathway that aviation safety is sufficiently provided for.

3.4.3 Summary of recommendations

- 70. HS7-LIGHT-Rec5: No changes are recommended in response to submissions on LIGHT-P2.
- 71. HS7-LIGHT-Rec6: That submission points relating to LIGHT-P2 are accepted/rejected as detailed in Appendix B.

3.5 LIGHT-R1 – Outdoor artificial lighting

3.5.1 Matters raised by submitters

- 72. WIAL [406.393, 406.392] oppose and seek to amend LIGHT-R1.2 as follows:

LIGHT-R1	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <ul style="list-style-type: none"> a. Compliance with the requirements of LIGHT-R1.1 cannot be achieved. <p>Matters of discretion are:</p> <ul style="list-style-type: none"> 1. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standards; 2. The matters in LIGHT-P1, LIGHT-P2; 3. The lighting guidelines in the relevant Design Guide; and 4. Whether there is a risk to aviation safety. <p><u>Notification status: For a resource consent application made in respect of Rule LIGHT R1.2 where there is a risk to aviation safety, WIAL must be considered to be an affected person in accordance with Section 95E of the RMA.</u></p>
-----------------	--

3.5.2 Assessment

- 73. In response to WIAL, I note the following in the General Approach chapter:

When deciding whether any person is affected in relation to an activity for the purposes of section 95E of the Act, Wellington City Council will give specific consideration to the following

entities with responsibility for any natural or physical resources which may be affected by the activity, including:

- In relation to infrastructure, the network utility operator that owns or operates that infrastructure;

74. The RMA definition of infrastructure (Noting that the PDP uses this definition of infrastructure too) includes an airport. WIAL is the Network Utility Operator for Wellington International Airport are the airport authority. As such, WIAL will get specific consideration when determining whether a party is an affected person for section 95E for any lighting activities that impact the airport. I therefore do not consider it necessary to add this notification statement.

3.5.3 Summary of recommendations

75. HS7-LIGHT-Rec7: No changes are recommended in response to submissions on LIGHT-R1.

76. HS7-LIGHT-Rec8: That submission points relating to submissions on LIGHT-R1 are accepted/rejected as detailed in Appendix B.

3.6 LIGHT-R2 – Outdoor artificial lighting in the coastal margin

3.6.1 Matters raised by submitters

77. WIAL [406.395, 406.394, 406.396] opposes and seeks to amend LIGHT-R2 as follows:

LIGHT-R2	<p>Outdoor artificial lighting in the coastal margin</p> <p>1. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. The activity complies with:</p> <ol style="list-style-type: none"> i. LIGHT-S1; ii. LIGHT-S2; iii. LIGHT-S3; iv. LIGHT-S4; v. LIGHT-S5; and vi. LIGHT-S6. <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. Whether there is evidence the area is used by at risk, threatened or endangered bird species for reproduction, feeding, or nesting; 2. Whether there is a functional need or operational need for the proposed lighting; 3. Whether lights are directed and shielded to avoid light spill; 4. Whether the lowest intensity lighting appropriate for the task is used; 5. Whether adaptive light controls are used to manage light timing, intensity and colour; and 6. Whether lights with reduced or filtered blue, violet and ultra-violet wavelengths are used; and 7. <u>The matters in LIGHT-P2; and</u> 8. <u>Whether there is a risk to aviation safety.</u> <p>Notification status: An application for resource consent made in respect of rule LIGHT-R2.1 is precluded from being publicly notified. For a resource consent application made in</p>
-----------------	--

	<u>respect of Rule LIGHT R2.1 where there is a risk to aviation safety, WIAL must be considered to be an affected person in accordance with Section 95E of the RMA.</u>
	<p>2. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of LIGHT-R2.1 cannot be achieved.</p> <p>Matters of discretion are:</p> <ol style="list-style-type: none"> 1. Whether there is evidence the area is used by at risk, threatened or endangered bird species for reproduction, feeding, or nesting; 2. Whether there is a functional need or operational need for the proposed lighting; 3. Whether lights are directed and shielded to avoid light spill; 4. Whether the lowest intensity lighting appropriate for the task is used; 5. Whether adaptive light controls are used to manage light timing, intensity and colour; 6. Whether lights with reduced or filtered blue, violet and ultra-violet wavelengths are used; 7. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standards; 8. The matters in LIGHT-P1, LIGHT-P2; 9. The lighting guidelines in the relevant Design Guide; and 10. Whether there is a risk to aviation safety. <p><u>Notification status: For a resource consent application made in respect of Rule LIGHT R2 2 where there is a risk to aviation safety, WIAL must be considered to be an affected person in accordance with Section 95E of the RMA.</u></p>

3.6.2 Assessment

78. In response to WIAL [406.395, 406.394], the primary difference between LIGHT-R1 and LIGHT-R2 is that LIGHT-R2 has an elevated activity status due to the increased risk to coastal fauna in the spatial extent that it concerns – the coastal margin. Beyond this risk, the same considerations as LIGHT-R1 apply.
79. This is reflected in the fact that R2.1 still requires compliance with all six standards, but in addition to this it is elevated to restricted discretionary and has matters of discretion that address the elevated risk to coastal wildlife. It does not imply a difference in effects in any other respect. In this regard, except for the amendments to account for the increased risk to coastal wildlife, R2.1 should remain the same.
80. R1.1 does *not* include LIGHT-P2 as a matter of discretion, nor does it include a consideration of risk to aviation safety. In the absence of evidence as to why coastal margin may have an increased risk which requires these two elements to be included as matters of discretion, I do not consider it appropriate to include them in R2.1. I also note my comment in paragraph 68 regarding WIAL’s comments on the suitability of the standards.
81. If the requirements of LIGHT-R2.1 are not met, R2.2 includes both the risk to aviation safety and LIGHT-P2 as matters of discretion, in a similar fashion to R1.2.
82. With regards to the notification status statement, I refer to my assessment at paragraphs 75 - 76.

3.6.3 Summary of recommendations

83. HS7-LIGHT-Rec9: No changes are recommended in response to submissions on LIGHT-R2.
84. HS7-LIGHT-Rec10: That submission points relating to LIGHT-R2 are accepted/rejected as detailed in Appendix B.

3.7 LIGHT – New Rules

3.7.1 Matters raised by submitters

85. The Director-General of Conservation [385.76] (Opposed by Wellington International Airport Limited [FS36.143]) seeks the addition of a rule similar to LIGHT-R2 as a restricted discretionary activity for outdoor artificial lighting adjacent to or within a significant natural area.

3.7.2 Assessment

86. In response to the submission from Director-General of Conservation [385.76], it is unclear about how it seeks to regulate lighting within Significant Natural Areas, and does not identify the specific adverse effects on significant natural areas that it would seek to address. LIGHT-R2 was developed in a strong evidential base - GWRC has identified Wellington Harbour and most other coastal areas in Wellington as significant habitat for seabirds and migratory shorebirds, and LIGHT-R2 responds to this by making outdoor artificial lighting in the coastal margin a restricted discretionary activity, requires compliance with all standards and has a suite of matters of discretion specific to addressing impacts on wildlife in the coastal margin, and includes reference to *National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds, Commonwealth of Australia 2020*.
87. I appreciate that a rule could be developed for outdoor artificial lighting in a similar format, however no evidence has been provided on how such a rule would address lightings effects on native flora and fauna within significant natural areas within Wellington. Likewise, no section 32AA analysis has been provided to assess the impacts of the addition of this framework.

3.7.3 Summary of recommendations

88. HS7-LIGHT-Rec11: No changes are recommended in response to submissions on new rules.
89. HS7-LIGHT-Rec12: That submission points relating to new rules are accepted/rejected as detailed in Appendix B.

3.8 LIGHT-S1 – Measurement methods

3.8.1 Matters raised by submitters

90. There were no submissions on LIGHT-S1.

3.8.2 Assessment

91. Mr Wright noted in his evidence at paragraphs 31 – 33 that Australian/New Zealand standard AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting, the standard on which LIGHT-S1 – S6 derive their limits from, has been updated to AS/NZS 4282:2023. Insofar as LIGHT-S1 – S6 are concerned, the limits within the 2019 standard remained unchanged in the 2023 standard. This is referenced in LIGHT-S1 and Mr Wright recommends updating it to the 2023 standard, which would not change the content due to the consistency between the 2019 and 2023 standards.

92. I agree with the recommendation of Mr Wright – this will ensure the references are up to date and does not represent a material departure from the content as notified. This amendment does not have submission scope, but I consider it an alternation of minor effect under clause 16 (2) of the Resource Management Act because it does not have a material impact on chapter outcomes due to the alignment with the standards between the 2019 and 2023 standards.

3.8.3 Summary of recommendations

93. HS7-LIGHT-Rec13: That LIGHT-S1 is amended as follows:

LIGHT-S1	Measurement Methods
-	Lighting limits must be measured and assessed in accordance with AS/NZS 4282: 2019 2023 Control of the Obtrusive Effects of Outdoor Lighting. In the event of any conflict between AS/NZS 4282: 2019 2023 and the District Plan, the District Plan shall prevail; and
	...

94. HS7-LIGHT-Rec14: That submission points relating to LIGHT-S1 are accepted/rejected as detailed in Appendix B.

3.9 LIGHT-S2 – Light spill

3.9.1 Matters raised by submitters

95. Ministry of Education [400.77] seek that LIGHT-S2 is retained as notified.
96. WIAL [406.398, 406.397] support and seek to amend LIGHT-S2 as follows:

LIGHT-S2	Light Spill
General Rural Zone Large Lot Residential Zone Future Urban Zone	<ol style="list-style-type: none"> 1. Outdoor artificial lighting must not exceed the following vertical illuminance levels: <ol style="list-style-type: none"> a. 7.00am – 10.00pm: 5 Lux; and b. 10.00pm – 7.00am: 1 Lux. <p>The vertical illuminance shall be measured at:</p> <ol style="list-style-type: none"> c. Any window of a habitable room of a building used for a sensitive activity on any adjacent site. <ol style="list-style-type: none"> 2. <u>All exterior lighting shall be directed downwards.</u>
Residential Zones Open Space and Recreation Zones Lincolnshire Farm Development Area (Future Urban Zone)	<ol style="list-style-type: none"> 1. Outdoor artificial lighting must not exceed the following vertical illuminance levels: <ol style="list-style-type: none"> a. 7.00am – 10.00pm: 10 Lux; and b. 10.00pm – 7.00am: 2 Lux. <p>The vertical illuminance shall be measured at:</p> <ol style="list-style-type: none"> c. Any window of a habitable room of a building used for a sensitive activity on any adjacent site; or d. The minimum setback distance for buildings and structures used for residential purposes for the relevant zone of an adjacent site if that site does

Upper Stebbings Glenside Development Area (Future Urban Zone)	<p>not contain a building used for a sensitive activity. The vertical extent of the calculation points for vertical illuminance shall be between:</p> <ol style="list-style-type: none"> i. 1.5m above ground level; and ii. The maximum building height permitted by the relevant zone. <p>2. <u>All exterior lighting shall be directed downwards.</u></p>
Neighbourhood Centre Zone Local Centre Zone Town Centre Zone Metropolitan Zone Mixed Use Zone City Centre Zone General Industrial Zone Hospital Zone Tertiary Education Zone Airport Zone Port Zone Stadium Zone	<p>1. Outdoor artificial lighting must not exceed the following vertical illuminance levels:</p> <ol style="list-style-type: none"> a. 7.00am – 10.00pm: 25 Lux; and b. 10.00pm – 7.00am: 5 Lux. <p>The vertical illuminance shall be measured at:</p> <ol style="list-style-type: none"> c. Any window of a habitable room of a building used for a sensitive activity on any adjacent site; or d. The minimum setback distance for buildings and structures used for residential purposes for the relevant zone of an adjacent site if that site does not contain a building used for a sensitive activity. The vertical extent of the calculation points for vertical illuminance shall be between: <ol style="list-style-type: none"> i. 1.5m above ground level; and ii. The maximum building height permitted by the relevant zone. <p>2. <u>All exterior lighting shall be directed downwards.</u></p>

3.9.2 Assessment

97. In response to WIAL [406.398, 406.397], I disagree with the recommended change to LIGHT-S2. The direction of lighting above the horizontal plane is regulated by LIGHT-S5 – Sky Glow standard. Whilst the standard may be intended to limit sky glow, this standard does this by regulating the amount of light from outdoor artificial lighting that can be directed above the horizontal plane. LIGHT-S2 is not the appropriate standard to address this matter.
98. Both LIGHT-R1.1 and LIGHT-R2.1 require compliance with all standards. Therefore, I am confident that any limits with respect to the direction of light above the horizontal will be regulated by LIGHT-S5 – Sky Glow, and no rules in the LIGHT chapter will be missing upward light ratio limits by rejecting this addition from LIGHT-S2.
99. Mr Wright notes in his statement of evidence at paragraph 19⁴ that in addition to the Skyglow standard covering upward light ratio's of outdoor artificial lighting, that requiring all light to be directed downward would place an overly restrictive control on all exterior lighting.
100. A minor amendment is to amend assessment criteria 2 to add “Any” to the beginning, to add clarity to the assessment criteria. This amendment does not have submission scope, but I consider it an alternation of minor effect under clause 16 (2) of the Resource Management Act, because it does not have a material effect on chapter outcomes and just increases clarity. I will also include the amendment from section 3.10.2 amendments “Impact” to “Effects”.

⁴ Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council (Lighting)

3.9.3 Summary of recommendations

101. HS7-LIGHT-Rec15: That LIGHT-S4 is amended as follows:

LIGHT-S2	Light Spill	
-	-	<p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; 2. Any conflict with established uses; 3. Effects on indoor amenity values and sleep quality of any nearby residential units; 4. Any positive effects generated from the use of artificial lighting; and 5. The effects impact of lighting on aircraft safety or the safe and efficient functioning of the Airport, including the ability of Air Traffic Control to guide aircraft, or pilots to operate aircraft.

102. HS7-LIGHT-Rec16: That submission points relating to LIGHT-S4 are accepted/rejected as detailed in Appendix B.

3.10 LIGHT-S3 – Glare

3.10.1 Matters raised by submitters

103. Ministry of Education [400.78] seek to retain LIGHT-S3 as notified.

104. WIAL [406.399, 406.400, 406.401] seek to amend LIGHT-S3 as follows:

LIGHT-S3	Glare	
General Rural Zone Large Lot Zone Future Urban Zone	<ol style="list-style-type: none"> 1. Outdoor artificial lighting on any site adjacent to a road, or adjacent to a site which contains a building used for a sensitive activity, must be selected, located, aimed, adjusted and/or screened so that the luminous intensity does not exceed the following: <ol style="list-style-type: none"> a. 7.00am – 10.00pm: 7,500 cd; and b. 10.00pm – 7.00am: 1,000 cd. 2. All exterior lighting shall be directed downward. 	<p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. Safety of the transport network; 2. Effects on indoor amenity values and sleep quality of any nearby dwellings; 3. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; 4. Any positive effects generated from the use of artificial lighting; and
Residential Zones Open Space and Recreation Zones	<ol style="list-style-type: none"> 3. Outdoor artificial lighting on any site adjacent to a road, or adjacent to a site which contains a building used for a sensitive activity, must be selected, located, aimed, adjusted and/or screened so that the luminous intensity does not exceed the following: <ol style="list-style-type: none"> a. 7.00am – 10.00pm: 12,500 cd; and 	

	<p>b. 10.00pm – 7.00am: 2,500 cd.</p> <p>4. <u>All exterior lighting shall be directed downward.</u></p>	<p>5. The <u>impact effects</u> of lighting on aircraft safety or the safe and efficient functioning of the Airport.</p>
<p>Neighbourhood Centre Zone</p> <p>Local Centre Zone</p> <p>Town Centre Zone</p> <p>Metropolitan Zone</p> <p>Mixed Use Zone</p> <p>City Centre Zone</p> <p>General Industrial Zone</p> <p>Hospital Zone</p> <p>Tertiary Education Zone</p> <p>Airport Zone</p> <p>Port Zone</p> <p>Stadium Zone</p>	<p>5. Outdoor artificial lighting on any site adjacent to a road, or adjacent to a site which contains a building used for a sensitive activity, must be selected, located, aimed, adjusted and/or screened so that the luminous intensity does not exceed the following:</p> <p>a. 7.00am – 10.00pm: 25,000 cd; and</p> <p>b. 10.00pm – 7.00am: 2,500 cd.</p> <p>6. <u>All exterior lighting shall be directed downward.</u></p>	

3.10.2 Assessment

105. In response to WIAL [406.399, 406.400, 406.401], I refer to my assessment in paragraphs 104 - 105 for LIGHT-S2 on the same matter – noting that the Sky Glow standard regulates the upward light ratio of lighting. I reject this submission point.

106. I agree that “Impact” should be replaced with “Effects”, to create more consistency with language. I further recommend this change throughout the standards where “Impact” is used in the same context.

3.10.3 Summary of recommendations

107. HS7-LIGHT-Rec17: That LIGHT-S3 is amended as follows:

LIGHT-S3	Glare	
-	=	<p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. Safety of the transport network; 2. Effects on indoor amenity values and sleep quality of any nearby dwellings; 3. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures;

		<ol style="list-style-type: none"> 4. Any positive effects generated from the use of artificial lighting; and 5. The impact effects of lighting on aircraft safety or the safe and efficient functioning of the Airport.
--	--	---

108. HS7-LIGHT-Rec18: That submission points relating to LIGHT-S3 are accepted/rejected as detailed in Appendix B.

3.11 LIGHT-S4 – Effects on road users

3.11.1 Matters raised by submitters

109. WIAL [406.402] seek to amend LIGHT-S4 assessment criteria as follows:

LIGHT-S4	Effects on road users
-	<p>-</p> <p>Assessment criteria where the standard is infringed:</p> <ol style="list-style-type: none"> 1. The safety of the transport network; 2. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; and 3. Any benefits from the artificial lighting. 4. <u>The impact of lighting on aircraft safety or the safe and efficient functioning of the Airport.</u>

3.11.2 Assessment

110. In response to WIAL [406.402], I reject this submission point. Both LIGHT-R1 and LIGHT-R2 include a restricted discretionary status for when any of the six standards are not met, and both include “Whether there is a risk to aviation safety” as a matter of discretion in those clauses. If LIGHT-S4 is not met for either LIGHT-R1 or LIGHT-R2, risk to aviation safety is a consideration. The addition of this further assessment criteria redundant.

111. I also point to Mr Wright⁵ noting that LIGHT-S4 is intended to control the effects on road users, not aircraft or airports.

3.11.3 Summary of recommendations

112. HS7-LIGHT-Rec19: No changes are recommended in response to submissions on LIGHT-S4.

⁵ Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council (Lighting), paragraph 21

113. HS7-LIGHT-Rec20: That submission points relating to LIGHT-S4 are accepted/rejected as detailed in Appendix B.

3.12 LIGHT-S6 – Externally illuminated surfaces

3.12.1 Matters raised by submitters

114. WIAL [406.403] seek to retain the assessment criteria within LIGHT-S6 as notified.
115. Ministry of Education [400.79, 400.80] support and seek to amend LIGHT-S6 assessment criteria as follows:

LIGHT-S6	Externally illuminated surfaces	
-	-	<p>Assessment criteria where the standard are infringed:</p> <ol style="list-style-type: none"> 1. The safety of the transport network; 2. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; 3. <u>Consider the effects on nearby</u> Conflict with existing sensitive activities; 4. Effects on indoor amenity values and sleep quality of any nearby residential units; 5. Any positive effects generated from the use of artificial lighting; and 6. Effects on established uses and their operation. 7. The impact of lighting on aircraft safety or the safe and efficient functioning of the Airport.

3.12.2 Assessment

116. In response to Ministry of Education [400.79, 400.80], I agree in part with the proposed amendment to the assessment criteria. The use of the term “Conflict” is unclear and not used in other assessment criteria in the plan. For consistency with assessment criteria within this standard and throughout the plan, and to use clearer language, I recommend the following wording:

<p>Assessment criteria where the standard are infringed:</p> <ol style="list-style-type: none"> 1. The safety of the transport network; 2. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; 3. <u>Effect on</u> existing sensitive activities; <p>...</p>
--

117. I consequentially reject the submission point from WIAL [406.403] seeking to retain the assessment criteria within LIGHT-S6 as notified, as I recommend the provision to be amended.
118. Whilst not raised in submissions, Mr Wright noted an issue in LIGHT-S6. LIGHT-S6 includes a note on how plan users should calculate the limits, which is in accordance with CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, Second Edition. Mr Wright notes that CIE 150:2017 has been superseded, and AS/NZS 4282:2023 now includes guidance on how to calculate these limits. If the relief is granted to amend the references to the updated standard in LIGHT-S1. then this note will not be necessary.⁶
119. I agree with the recommendation from Mr Wright on these references, although these amendments do not have submission scope. I consider it an alternation of minor effect under clause 16 (2) of the Resource Management Act. It does not represent a material departure from the limits and guidance on calculation of limits as notified, will provide updated references, and will streamline the chapter.
120. I also recommend the amendment of “Impacts’ to “Effects”, as per my assessment at section 3.10.2.

3.12.3 Summary of recommendations

121. HS7-LIGHT-Rec21: That LIGHT-S6 is amended as follows:

LIGHT-S6	Externally illuminated surfaces	
-	<p>1. The average surface luminance for an intentionally artificially lit building façade shall not exceed 5 cd/m².</p> <p>Note: The limits shall be determined by calculation or measurement in accordance with CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, Second Edition.</p> <p>2. The average surface luminance for an intentionally artificially lit building façade shall not exceed 10 cd/m².</p> <p>Note: The limits shall be determined by calculation or measurement in accordance with CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, Second Edition.</p>	<p>Assessment criteria where the standard are infringed:</p> <ol style="list-style-type: none"> 1. The safety of the transport network; 2. The number, placement, design, height, colour, orientation and screening of light fittings and light support structures; 3. Effects on nearby Conflict with existing sensitive activities; 4. Effects on indoor amenity values and sleep quality of any nearby residential units; 5. Any positive effects generated from the use of artificial lighting; and 6. Effects on established uses and their operation. 7. The impact effects of lighting on aircraft safety or the safe

⁶ Statement of evidence of Glen Andrew Wright on behalf of Wellington City Council, paragraphs 31 – 33.

	<p>3. The average surface luminance for an intentionally artificially lit building façade shall not exceed 25 cd/m².</p> <p>Note: The limits shall be determined by calculation or measurement in accordance with CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, Second Edition.</p>	<p>and efficient functioning of the Airport.</p>
--	---	--

122. HS7-LIGHT-Rec22: That submission points relating to LIGHT-S4 are accepted/rejected as detailed in Appendix B.

4.0 Minor and inconsequential amendments

123. Pursuant to Schedule 1, clause 16 (2) of the RMA, a local authority may make an amendment, without using the process in this schedule, to its proposed plan to alter any information, where such an alteration is of minor effect, or may correct any minor errors.
124. The following minor and inconsequential amendments relevant to this report are identified below and will be corrected:
- a. Add “Residential” to Large Lot Zone references in zone boxes, correcting references to Large Lot Residential Zone
 - b. Upon review of the LIGHT chapter, it has come to my attention that the Town Centre Zone was included in the list of applicable zones for rules. As this Zone no longer exists in the PDP, I recommend removing these references.
125. The recommended amendments are set out in Appendix A.

5.0 Conclusion

126. This report has provided an assessment of submissions received in relation to the LIGHT Chapter.
127. Having considered all the submissions and reviewed all relevant statutory and non-statutory documents, I recommend that PDP should be amended as set out in Appendix A of this report.

5.1 Recommendations

128. I recommend that:
- a. The Independent Hearing Panel accept, accept in part, or reject submissions (and associated further submissions) as outlined in Appendix B of this report; and
 - b. The PDP is amended in accordance with the changes recommended in Appendix A of this report.

6.0 Appendix A: Recommended Amendments to the LIGHT Chapter

Where I recommend changes in response to submissions, these are shown as follows:

- Text recommended to be added to the PDP is underlined.
- Text recommended to be deleted from the PDP is ~~struck through~~.

6.1 Appendix B: Recommended Responses to Submissions and Further Submissions on LIGHT Chapter

The recommended responses to the submissions made on this topic are presented in the table attached at Appendix

6.2 Appendix C: Statement of Evidence of Glen Andrew Wright on behalf of Wellington City Council
