Nelson City Council
Te Kaunihera o Whakatū

Addendum 1B to the Section 42A Report – Flooding

Plan Change 29 to the NRMP

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Date: 19 August 2024

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1.0 Acronyms and Abbreviations

Abbreviation	Full Text
Council	Nelson City Council
DNP	Draft Whakamahere Whakatū Nelson Plan
FDS	Nelson Tasman Future Development Strategy 2022-2052
MDRS	Medium Density Residential Standards prescribed in Schedule 3 of the RMA
NES	National Environmental Standard
NPS	National Policy Statement
NPSUD	National Policy Statement Urban Development 2020 (updated May 2022)
NRMP	Operative Nelson Resource Management Plan 1997
NZCPS	New Zealand Coastal Policy Statement 2010
PC29	Plan Change 29
Panel	Plan Change 29 Hearings Panel
RMA	The Resource Management Act 1991
RPS	Operative Nelson Regional Policy Statement 1997
JWS	Joint Witness Statement

2.0 Introduction

1. This addendum to the Section 42A report for Plan Change 29 **(PC29)** to the Nelson Resource Management Plan has been prepared to address matters raised in expert evidence on behalf of submitters regarding the flooding provisions.

2. The addendum is organised by key issue, consistent with the analysis of submissions in the Section 42A Report – Natural Hazards, which was a combined report prepared by Janice Carter and myself. For this addendum S42A Report, I address the flooding provisions as a discrete issue.

3. A list of the further amendments to PC29 recommended in relation to these matters is provided in the body of the report below and in the appendices. The further amendments are also included in the consolidated addendum version of the provisions available on the PC29 Hearings webpage. The further amendments are shown in red text with yellow highlight.

4. I attended expert conferencing for Flooding on 30 July 2024[1]. The Joint Witness Statement (**JWS**) from 30 July 2024 (Issue 6) states that the experts agree it would be appropriate to remove both the PC29 Flood Hazard Overlay and PC29 High Flood Hazard Overlay from two lots on part of the Manuka Street Hospital site. I address this matter in Section 3.9 of the report below.

5. Numerous matters remained in contention following the expert conferencing on 30 July 2024 as outlined in the JWS. Further expert conferencing was held (as outlined below) to discuss these and other matters raised in evidence. This expert conferencing did not result in a JWS.

6. In addition to 30 July 2024, I had further discussions with submitters on the following dates:

    a) Matt Bonis and Andrew Craig for Nelson Airport Limited (**NAL**), 6 August 2024.

    b) Matt Bonis and Andrew Craig for NAL, and Mark Lile and David Carlson-McColl for Manuka Street Hospital 8 August 2024;

    c) Chris Horne for the telecommunication companies[2] on 1 August 2024.

    The addendum below provides further assessment of the matters that remain in contention and provides my recommendations in response to the matters raised at expert conferencing and subsequent discussions with submitters.

[1] https://shape.nelson.govt.nz/hearing-portal-plan-change-29/expert-conferencing
[2] Chorus New Zealand (S486); Connexa Limited (S487); Aotearoa Tower Group Limited (S488); One New Zealand Limited (S490) and Spark New Zealand Trading Limited (S491).

3.0 Further Evaluation and Recommendations

3.1 ISSUE 1 Regionally significant infrastructure, the Airport and telecommunication companies

3.1.1 Issues raised in submitter evidence

7. The evidence of Matt Bonis for NAL[3] requests that the Airport, as regionally significant infrastructure, is provided for in the flood related policies. Specifically, Mr Bonis requests that regionally significant infrastructure is recognised in Policy DO2.2.6 and Policy DO2.2.10.

8. The JWS-Flooding records at paragraph 3.2(a) that Chris Horne (telecommunication companies) and Matt Bonis (Nelson Airport Limited) suggest the following alternate wording, or *is appropriate having regard to the functional and/or operational need for Regionally Significant Infrastructure to locate with in Flood Areas* to replace the wording I have proposed to Policy DO2.2.4.

3.1.2 Evaluation

9. The Airport and telecommunication facilities fall within in the proposed definition of Nationally and/or Regionally Significant Infrastructure (refer to the JWS, Infrastructure, paragraph 3.2(a)). It is noted that the JWS for Infrastructure agrees to the amendment of clause (g) of the definition of Nationally and/or Regionally Significant Infrastructure as shown below:

> (a) All experts agree to amend the definition and objective as follows:
>
> **Nationally and/or Regionally Significant Infrastructure**
>
> means:
>
> a. State highways; and
> b. the national grid electricity transmission network; and
> c. facilities for the generation and/or transmission of electricity where it is supplied to the National Grid and/or the local distribution network; and
> d. electricity distribution networks; and
> e. Nelson Airport; and
> f. Port Nelson; and
> g. ~~facilities and structures necessary for the operation of~~ telecommunications and radiocommunications networks operated by network utility operators; and
> h. the local authority water supply network and water treatment plants; and
> i. the local authority wastewater and stormwater networks, systems and wastewater treatment plants.

[3] Refer to paragraphs 7.3-7.17.

10. Reflecting on the matters raised by Mr Bonis, I support amending Policy DO2.2.6 and the Matters of Discretion for rules INr60A, INr60B, INr60C INr60E INr60F to reference Nationally and/or Regionally Significant Infrastructure because it recognises that need for nationally or regionally significant infrastructure to locate in certain areas. I discuss this amendment further in section 3.5 of the report below.

11. I do not support amending Policy DO2.2.10 Explanation and Reasons as I consider that the text currently provides for the consideration of all proposed development including nationally and/or regionally significant infrastructure. I discuss this further in section 3.6 of the report below.

3.1.3 S32AA Evaluation

12. Not required.

3.2 ISSUE 2 Flood hazard rule framework

3.2.1 Issues raised in submitter evidence

13. As outlined in the PC29 Section 32 report (Part 2), the flood hazard rule framework is part of the overall PC29 approach to natural hazards including flooding. The approach consists of an objective, policies, rules and flood hazard overlays. The rule framework for flooding generally consists of limited Permitted and predominantly Restricted Discretionary activities.

14. In Mark Lile's evidence on behalf of Manuka Street Hospital (paragraph 34) he notes *Other significant changes include the new rules requiring consent for building extensions (taking up flood capacity) or to undertake earthworks in the Flood Hazard Overlay and High Flood Hazard Overlay, particularly as there is no operative flood hazard currently applying to the site*. Paragraph 59 of his evidence states that the introduction of new flood overlays and rules REr.83B and REr.83E creates a new consenting requirement for new buildings and earthworks. He states that as much of the area within the overlays is developed, the relevance of these is questioned.

15. Matt Bonis in paragraph 9.8 of his evidence for NAL comments on the flooding provisions, he states *…there is little nuance in the provisions to the extent to which they should apply to specific activities and/or larger land holdings. The provisions apply to all activities with the Industrial Zone regardless of their scale and type. Consequently, there would be substantial transaction costs associated with applying for resource consents under these provisions even where there are little or no adverse effects associated with natural hazards, particularly for a landholding of the scale of Nelson Airport.*

16. In the Joint Witness Statement-Flood (3.1(d) *Mark Lile advised that the Manuka Street Hospital submission concern with 3 new rules, being 83B, REr.83C and REr.83E*.

17. The Joint Witness Statement-Flooding at clause 3.1(d) notes that Mark Lile and Matt Bonis have concerns regarding the PC29 flood hazard rule approach and transaction costs.

18. The Joint Witness Statement-Flooding at clause (3.2(b) also states in relation to the flood hazard rules - *These rules need to be reviewed for applicable thresholds and application to other zones for consistency, where there is scope.*

3.2.2 Evaluation

19. I have considered the above matter to amend the flooding rule framework to allow for increasing the Permitted Activity threshold, or the number of Permitted activities in REr.83, REr.83C and REr.83E or the Industrial zone (INr.60A-INr.60F) to reduce transaction costs. There have been some amendments to the rule REr.83E (refer to the paragraph below). I outline specific amendments to the INr.60A-INr.60F rules in later sections of this report.

20. In relation to 83E Flood Areas except Flood Paths or Floodways-Earthworks, I recommend the following amendments in addition to those included specifically for the installation of new telecommunication poles and equipment (refer to Issue 4 below) are included in the Permitted Activity rule 83.E.1.

Permitted Activity 83E.1 Flood Areas except Flood Paths or Floodways-Earthworks

- the insertion of excavation or in 'a'
- the insertion of 'or' at the end of 'c'
- the insertion of the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or

trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works.

21. I have reviewed REr.83E.1 in relation to the JWS-Flood paragraphs (3.1(d) and (3.2(b). I consider that the amendments to REr.83E.1 will assist with increasing Permitted activities in relation to earthworks in Flood Areas except Flood Paths or Floodways. If the original ground level is restored at the completion of the works the flood behaviour will not be affected at the site. This amendment in turn will assist with reducing the need to obtain a resource consent for numerous activities.

22. The amendments will also allow work on existing above ground car parks or access ways for development that is not being undertaken by a network utility. The addition of trenching as a Permitted activity is also considered a matter that would be of benefit to organisations that are not network utilities.

23. Regarding rules 83B and REr.83C, I consider that the rules particularly concerning Permitted Activities are appropriate in relation to flood hazard in residential areas. As residential activities are of a 24-hour nature and a flood event could occur at any time it is important that appropriate ground and floor level are instituted to ensure that buildings are appropriately sited and at a height that addresses the flood risk. A Restricted Discretionary rule approach provides for Matters of Discretion to require the consideration of matters such as access. I note that whilst the Manuka Street Hospital may be largely developed it is in a residential zone. The

amendment of the rule would potentially affect a large number of existing and future residential properties shown in the flood overlays.

24. I consider that the natural hazard framework in relation to flooding which sets the approach for policy and the status of activities being either Permitted or Restricted Discretionary should not be amended given the nature of the flood hazard within the PC29 extent. I have not altered my view on this matter and continue to support Sections 8.2 and 8.3 of the Section 42A, Natural Hazards report relating to this.

3.2.3 Recommendation

25. I recommend the following changes to the following provision:

Provision(s)	Officer recommendations
Permitted Activity 83E.1 Flood Areas except Flood Paths or Floodways-Earthworks	• the insertion of excavation or in 'a' • the insertion of 'or' at the end of 'c' • the insertion of the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or • trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works.

3.2.4 S32AA Evaluation

26. The proposed amendment to Permitted Activity 83E.1 Flood Areas except Flood Paths or Floodways-Earthworks seeks to address the matters raised in the expert evidence JWS-Flooding paragraphs 3.1(d) and 3.2(b). The amendments allow a wider range of Permitted activities. I consider that it effectively and efficiently achieves the PC29 natural hazard objective DO2.2 *Risks to Whakatū Nelson's people, property and infrastructure from natural hazards, including the effects of climate change, are recognised and managed and significant risk is avoided* and is consistent with the following policies:

- DO2.2.4 flood hazard: subdivision, use and development in flood areas
- DO2.2.5 flood hazard: building sand activities
- DO2.2.7 flood hazard: activities and development
- DO2.2.8 flood hazard: redevelopment

Costs/Benefits
The proposed amendments can reduce the need for a resource consent. This may lead to reduced time and financial costs to applicants and ratepayers.

Risk of acting or not acting
There are no risks as there is sufficient information.

Decision about most appropriate option
For the above reasons, the recommended amendments are considered to be more appropriate than in the notified version of PC29 in achieving the purpose of the RMA.

3.3 ISSUE 3 Policies

3.3.1 Issues raised in submitter evidence

27. Two experts have raised issues with the overall approach of the flood related policies of PC29.

28. Mark Lile in paragraph 115 of his evidence for Manuka Street Hospital states *…, from a planning perspective, it is also important that the policy framework supporting PC29 does not discourage or prevent further development of this site given these manageable risks. The same goes for other sites where risks can be managed through appropriate engineering design. This relates directly to the policy framework contained with DO2 (Chapter 5, NRMP)…..* Additionally, paragraph 116 of Mark Lile's evidence states *….that the flooding rules and supporting policy framework be a topic for expert conferencing with the planners and flooding engineers*.

29. The JWS-Flooding, paragraph 3.1(c) notes comments from Mark Lile and Matt Bonis regarding policies DO2.2.4. The JWS states *…Mark Lile and Matt Bonis consider that Policy DO2.2.4 currently contains some inconsistency to the wider policy direction in relation to flooding. Other provisions such as policy DO2.2.5 provide the opportunity for mitigation of the potential effects of natural hazards. Subclause 6 of this policy seems to apply the avoidance approach which does not align with the balance of this policy and the wider provisions including the rule framework (e.g. the RDA status).*

30. The expert conferencing on 30 July discussed the policy DO2.2.4. Subsequent discussions (as outlined above) identified that the Manuka Street Hospital and NAL consider that the policy framework (ten flood related policies) was not always clear.

31. Issues 3A – 3C below address the submitter's requested amendments to the policies and sets out my opinion in response.

3.4 ISSUE 3A Policy DO2.2.4 flood hazard: subdivision, use and development in flood areas

3.4.1 Issues raised in submitter evidence

32. Chris Horne for the telecommunication companies[4] included a request to amend, DO2.2.4 flood hazard: subdivision, use and development in flood areas. Paragraph 32 of Chris Horne's evidence seeks to add to clause 2, *recognising the functional and/or operational need for some activities to locate within the Flood Areas.*

33. The Joint Witness Statement-Flooding records at clause 3.2(a) that Chris Horne and Matt Bonis (Nelson Airport Limited) suggest the following alternate wording, or *is appropriate having regard to the functional and/or operational need for Regionally Significant Infrastructure to locate with in Flood Areas.*

34. David John Carlson-McColl, in his evidence (paragraphs 8.4-8.8) suggests that Policy DO2.2.4(6) contradicts other clauses in the Policy and the rule REr.83B. In his evidence he provides the following suggestions:

> *If Clause 6 is to be retained, I recommend amending as follows:*
>
> *Either*
>
> *6. Building platforms are not located within ~~land identified in the High Flood Hazard~~, Floodways~~,~~ or Flood Paths* unless the hazard can be adequately mitigated*; and*
>
> *or*
>
> *6. Building platforms are not located within land identified in the High Flood Hazard, Floodways, or Flood Paths unless the hazard can be adequately mitigated; and*

3.4.2 Evaluation

35. Having considered the above evidence, I proposed the following amendments to Policy DO2.2.4:

> DO2.2.4 flood hazard: subdivision, use and development in flood areas
>
> Control subdivision, use and development within Flood Areas to ensure:
>
> 1. the type, frequency and scale of projected flooding, and likely damage and effects is appropriately assessed; and
>
> 2. the building, land use or activity being proposed is suitable and its vulnerability to risk from the flood hazard is not increased or is appropriate having regard to the functional or operational need of the building, land use or activity within that location; and

[4] Chorus New Zealand (S486); Connexa Limited (S487); Aotearoa Tower Group Limited (S488); One New Zealand Limited (S490) and Spark New Zealand Trading Limited (S491).

3. significant risk to people, property, infrastructure and the natural environment, including social and cultural effects, from the flood hazard is avoided; and

4. any adverse effects on the function of the floodplain, including flood storage capacity and conveyance are mitigated; and

5. any adverse effects beyond the subject site including any exacerbation of, and transfer of, risk is appropriately managed; and

~~6. building platforms are not located within land identified in the High Flood Hazard, Floodways, or Flood Paths;~~

7. the design, location, layout and construction of buildings and structures, including building platforms, ground/floor levels and adaptation methods provide resilience against and mitigate the projected effects of the flood hazard; and

8. any adverse effects on infrastructure and access from flooding in a Flood Areas are mitigated; and

9. the storage and use of hazardous substances in relation to the flood hazard is appropriately managed.

36. I consider that the amendment to Policy DO2.2.4(2) is more efficient and effective in achieving objective DO2.2 and DO14.4 and strikes an appropriate balance between managing natural hazard risks, including avoiding significant risk, and recognising and providing for the efficient use of infrastructure that has specific functional and operational requirements to locate in specific areas.

37. I support deleting clause 6 of Policy DO2.2.4 as it contradicts clause 7, which would allow consideration of whether buildings could locate in a High Flood Hazard area subject to evaluation through the resource consent process.

38. Functional need and operational need are defined terms in the National Planning Standards. To support with the interpretation of Policy DO2.2.4, I support including these definitions in the NRMP. The use of the definitions will provide clarity for plan users when interpreting the policy.

3.4.3 Recommendations

39. I recommend the following amendments to Policy DO2.2.4 flood hazard: subdivision, use and development in flood areas and associated provisions:

Provision(s)	Officer recommendations
Policy DO2.2.4 flood hazard: subdivision, use and development in flood areas.	Refer to Appendix 1.

Meaning of Words	Insert the definitions of operational need and functional need into the Meaning of Words. operational need means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints. functional need means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment.

3.4.4 S32AA Evaluation

40. I consider that the proposed amendments to Policy DO2.2.4, particularly the deletion of clause 6, clarifies the intent of the policy and better gives effect to other relevant objectives in the NRMP including DO14.4.

Costs/Benefits

41. The proposed amendments may reduce resource consent time and reporting requirements with the increased clarity of the intent of the Policy. It is anticipated that this would reduce time and financial costs to applicants, ratepayers and Council.

Risk of acting or not acting

42. There are no risks as there is sufficient information.

Decision about most appropriate option

43. For the above reasons, I consider that the recommended amendments are more appropriate than the notified version of PC29 in achieving the purpose of the RMA.

3.5 ISSUE 3B Policy DO2.2.6 flood hazard: hard protection structures

3.5.1 Issues raised in submitter evidence

44. The evidence of Matt Bonis for NAL raises two matters in relation to DO2.2.6 flood hazard: hard protection structures:

a) paragraph 5.2(b) of the evidence states *ensure the definition and recognition of "nationally and regionally significant infrastructure" remains appropriate in the context of other directive constraints on development in identified hazard areas.*

b) (paragraphs 7.3-7.8) The inclusion of *practical defence*.

45. Appendix A of Mr Bonis's evidence sets out the amendments he proposes.

3.5.2 Evaluation

46. Having reviewed the evidence of Mr Bonis and participated in the expert conferencing (outlined at the beginning of this report) concerning this matter, I propose the following amendments to Policy DO2.2.6:

a) the insertion of 'practicable' in clause 1 of Policy DO2.2.6. This will assist with ensuring the understanding of clause 1 of the policy.

b) the insertion of Is appropriate having regard to the functional and/or operational need for Nationally and/or Regionally Significant Infrastructure to locate within Flood Areas; and recognises the necessity to locate nationally and/or regionally significant infrastructure in certain locations.

47. Refer to Appendix 2 for a full version of the notified and amended Policy DO2.2.6.

3.5.3 Recommendation

48. I recommend further amendments to DO2.2.6 flood hazard: hard protection structures.

Provision(s)	Officer recommendations
DO2.2.6 flood hazard: hard protection structures:	• Insert 'practicable' in clause 1 • Insert Is appropriate having regard to the functional and/or operational need for Nationally and/or Regionally Significant Infrastructure to locate within Flood Areas; and as clause 4.

3.5.4 S32AA Evaluation

Costs/Benefits

49. The proposed amendments may reduce resource consent time and reporting requirements with the increased clarity of the intent of the Policy. The inclusion of nationally and/or regionally significant infrastructure will assist in the management of hard protection structures. It is anticipated that this would reduce time and financial costs to applicants, ratepayers and Council.

Risk of acting or not acting

50. There are no risks as there is sufficient information.

Decision about most appropriate option

51. For the above reasons, I consider that the recommended amendments are more appropriate than the notified version of PC29 in achieving the purpose of the RMA.

3.6 ISSUE 3C Policy DO2.2.10 high flood hazard, floodways and flood paths: subdivision, use and development

3.6.1 Issues raised in submitter evidence

52. Matt Bonis for the NAL in paragraphs 7.13-7.17 of his evidence requests that the policy DO2.2.10 high flood hazard, floodways and flood paths: subdivision, use and development Explanation and Reasons is amended to include regionally significant infrastructure. Appendix A of the evidence provides suggested wording.

3.6.2 Evaluation

53. I consider that it is unnecessary to include regionally significant infrastructure or nationally and/or regionally significant infrastructure as the policy currently provides for the consideration of all proposed development therefore specific reference to this type of infrastructure is not required. Refer to Appendix 3 for the Policy.

3.6.3 Recommendation

54. I do not recommend further amendments to the DO2.2.10 high flood hazard, floodways and flood paths: subdivision, use and development Explanation and Reasons.

3.6.4 S32AA Evaluation

55. Not required.

3.7 ISSUE 4 Installation of new telecommunication poles and attached equipment as a Permitted activity in the urban zones, REr and ICr outside of the road on land shown as a flood hazard

3.7.1 Issues raised in submitter evidence

56. Chris Horne in his evidence for the telecommunications companies[5] states (paragraph 12) *Most but not all telecommunications network equipment is regulated by the NESTF. Regulation 57 of the NESTF disapplies district plan natural hazard rules to regulated equipment…….The main exception deployed are new poles and attached antennas outside of roads in urban zones. Consequently,* the *Companies have elected to only pursue relief on the rules for new telecommunications poles/attached antennas including any ancillary earthworks in zones where NESTF does not apply, being urban zones outside of roads.* Mr Horne recommends amendments to the following flood hazard rules in relation to Permitted activities:

a) REr.83D Flood Areas except Flood Paths or Floodways - Network utility
b) ICr.59D Flood Areas except Flood Paths or Floodways - Network utility

[5] Chorus New Zealand (S486); Connexa Limited (S487); Aotearoa Tower Group Limited (S488); One New Zealand Limited (S490) and Spark New Zealand Trading Limited (S491).

c) REr.83E Flood Areas except Flood Paths or Floodways - Earthworks
d) ICr.59E Flood Areas except Flood Paths or Floodways - Earthworks

57. The Joint Witness Statement-Flooding records:

a) 3.2 (b) REr.83E and ICr59E and equivalent earthworks rules in the industrial zone. These rules need to be reviewed for applicable thresholds and application to other zones for consistency, where there is scope.
b) 3.2 (c) REr.83D and ICr.59D. These rules relate to poles in flood hazard areas and need to be consider(ed) in light of the submissions.

3.7.2 Evaluation

58. I have discussed the matter with Mr Horne and agree that amendments to the following rules are appropriate. The amendments include as a Permitted activity, the installation of new telecommunications poles within the flood hazard overlays (except Flood Paths and Floodways) and associated earthworks. This will require amendments to the rules listed below. I understand Mr Horne agrees with the amendments.

a) REr.83D.1 Flood Areas except Flood Paths or Floodways - Network utility
b) ICr.59D.1 Flood Areas except Flood Paths or Floodways - Network utility
c) REr.83E.1 Flood Areas except Flood Paths or Floodways - Earthworks
d) ICr.59E.1 Flood Areas except Flood Paths or Floodways - Earthworks

59. The amendments are shown in Appendices 4, 5, 6 and 7. In summary the amendments are under the Permitted Activity rule in the REr and ICr zones include Aerials and under the REr and ICr zones allowing for earthworks associated with an Aerial to be a Permitted activity in an area shown in the flood overlays (except Flood Paths or Floodways).

60. As the NRMP definition of *Aerial* better defines the installation of new telecommunication poles and attached equipment than the NRMP definition *Telecommunication Facility, Aerial* this has been used in the proposed amendments. The NRMP defines *Aerial* as being:

> *means an antenna or similar communication device formed by a rod, wire, dish or other structure by which radio, telephone or electromagnetic signals are transmitted or received. It includes any support structure and guy wires. An aerial may include a single mast or pole supporting several antennas. Where a wire or other antenna is supported between two or more poles, each pole is considered to be an aerial.*

61. It is noted that the third line of the definition refers to a pole.

62. I consider that allowing the installation of new telecommunication poles and associated equipment in the REr and ICr zones in the Flood Areas except Flood Paths and Floodways as a Permitted activity is reasonable as:

a) the poles will not be in a Flood Path or Floodway;

b) the Permitted activity can only be undertaken by an organisation that meets the definition of a utility organisation;

c) constraints such as height are addressed in other rules.

63. The amendment of REr.83D.1 Flood Areas except Flood Paths or Floodways - Network utility and ICr.59D.1 Flood Areas except Flood Paths or Floodways - Network utility to include *Aerials* will enable new telecommunication poles and equipment to be a Permitted activity in the REr and ICr zones. This will be beneficial for the provision of telecommunication infrastructure and in turn the residents and businesses of Nelson.

64. The amendment of REr.83E.1 Flood Areas except Flood Paths or Floodways - Earthworks and ICr.59E.1 Flood Areas except Flood Paths or Floodways - Earthworks will enable the earthworks associated with the new telecommunication poles and equipment to be a Permitted activity in the flood hazard areas (except Flood Paths and Floodways) in the REr and ICr zone. This will be beneficial for the provision of telecommunication infrastructure. As these organisations will have policies relating to matters such as environmental management, I consider that the risk of adverse effects is low.

3.7.3 Recommendation

65. I recommend the following changes to the following provisions:

Provision(s)	Officer recommendations
• REr.83D.1 Flood Areas except Flood Paths or Floodways - Network utility • ICr.59D.1 Flood Areas except Flood Paths or Floodways' - Network utility	an aerial is inserted as (a)
• REr.83E.1 Flood Areas except Flood Paths or Floodways - Earthworks • ICr.59E.1 Flood Areas except Flood Paths or Floodways - Earthworks	• Add is for the installation of an aerial; or

3.7.4 S32AA Evaluation

66. The proposed amendments to the rules concerning the installation of new telecommunication poles and associated equipment efficiently and effectively achieves the following Policies, as the amendments do not allow the installation of new poles to occur in a Flood Path or Floodway. Additionally, the Permitted activity can only be undertaken by an organisation that meets the definition of utility organisation. The relevant policies are:

a) DO2.2.4 flood hazard: subdivision, use and development in flood areas
b) DO2.2.5 flood hazard: building sand activities
c) DO2.2.7 flood hazard: activities and development
d) DO2.2.8 flood hazard: redevelopment

Costs/Benefits

67. The proposed amendments can remove the resource consent reporting requirements as the activity will be a Permitted activity. It is anticipated that this would reduce time and financial costs to the Communication organisations and in turn the community.

Risk of acting or not acting

68. There are no risks as there is sufficient information.

Decision about most appropriate option

69. For the above reasons, I consider that the recommended amendments are more appropriate than the notified version of PC29 in achieving the purpose of the RMA.

3.8 ISSUE 5 Industrial Zone rules (INr.60A-60F)

3.8.1 Issues raised in submitter evidence

70. The evidence of Matt Bonis (paragraphs 9.1-9.11) and Andrew Craig (3.4 (a)-(f) for NAL seeks amendments to the Industrial zone rules relating to flood hazard. It is understood that the primary reasons for amendments being sought is that the Permitted activity thresholds do not assist with the activities of the Airport. The rules INr.60A-60F are considered below. I have also discussed this briefly in Issue 2 above.

INr.60A Flood Areas, except Flood Path or Floodway, Storage of a hazardous substance

71. In relation to INr.60A.1 Permitted activity, Paragraph 3.4(a) of Andrew Craig's evidence suggests that the use of NRMP Appendix 21 and the *Hazardous Substances and New Organisms Act 1996* would be more appropriate. The evidence of Matt Bonis (paragraph 9.7) supports this view.

72. Appendix A of Matt Bonis evidence suggests the inclusion of *the benefits and/or the functional or operational needs associated with regionally significant infrastructure to locate within the hazard area* is included in INr.60A.3. Refer to Issue 1 above regarding regionally significant infrastructure.

INr.60B Flood Areas, except any Flood Path or Floodway Building and below ground swimming pools

73. As outlined in Issue 2, the type of development and thresholds have been raised in evidence and noted in the JWS.

INr.60C except Flood Paths or Floodways – Fence, wall, retaining wall, outside storage

74. In the evidence of Andrew Craig (3.4.(c)) it is suggested that the transmissivity amount in relation to fences in the rule is high and that the rule is unnecessary in relation to the Airport Matt Bonis (paragraph 9.7).

INr.60D Flood Areas except Flood Paths or Floodways – Network utility

75. The evidence of Andrew Craig (3.4.(d) states that I doubt this rule is based on evidence of potential effects, and I do not think it is necessary to apply to Airport land. Matt Bonis agrees (paragraph 9.7).

INr.60E Flood Areas except Flood Paths or Floodways – Earthworks

76. Andrew Craig in his evidence at 3.4.(e) states "Earthworks" specifically within any Flood Area identified in PC29 overlays and imposes much stricter limits than PP30 AIRPz.46/PC29 INr.54. I doubt this rule is based on evidence of potential effects, and I do not think it is necessary to apply to Airport land. Matt Bonis in his evidence (paragraph 9.7) agrees it would be overly restrictive if applied to the Airport.

INr.60F Flood Areas except Flood Paths and Floodways – Flood mitigation and protection works

77. Andrew Craig in his evidence (3.4(f) suggests that the definition of 'minor' in relation to infrastructure upgrade could introduce ambiguity and he seeks clarification.

3.8.2 Evaluation

INr.60A Flood Areas, except Flood Path or Floodway - Storage of a hazardous substance

78. I consider that the use of a specific rule for the management of the storage of hazardous substances in areas shown on the Flood Overlays is preferred over referring to the NRMP Appendix 21. Appendix 21 does not reference the PC29 Flood Overlays so an amendment would be required. Given this, it is recommended that there are no amendments to INr.60A.1 Permitted activity.

79. In relation to INr.60A.3, the inclusion of the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.as a separate matter will clarify the consideration of nationally/or regionally significant infrastructure.

80. Refer to Appendix 8 for the full text of the rule and my recommended amendments.

INr.60B Flood Areas, except any Flood Path or Floodway - Building and below ground swimming pools

81. In response to the issues raised in the evidence of Matt Bonis and Andrew Craig, I propose amendments to the Permitted activity rule, INr.60B.1(d) as shown in Appendix 9.

82. The proposed amendment provides the opportunity for Permitted additions beyond the 10m² threshold for larger sites such as the Airport. This amendment would be in addition to c) which allows additions up to 10m² gross floor area that do not require a statement from a Chartered Engineer.

83. I have not included new buildings as a Permitted activity as I consider that the finished floor level for new buildings should be a consideration best addressed through a Restricted Discretionary resource consent process.

84. The following additions to INr.60B.3 (Matters of Discretion for infringements to permitted activity standards) below will assist in considering the location of development in a flood hazard area:

> xiv and
>
> xv the functional and/or operational need to be located within the hazard area; and
>
> xvi the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

85. Refer to Appendix 9 for the proposed rule.

INr.60C except Flood Paths or Floodways – Fence, wall, retaining wall, outside storage

86. I recommend the following amendment to INr.6OC.1 which will allow for certain retaining walls in flood hazard areas as a Permitted activity.

- a retaining wall is not greater than 1.2m in height and does not obstruct a flowpath or
- the following amendment addresses the situation in the notified Permitted activity rule where retaining walls were included as a fence, "a" fence; or wall ~~or retaining wall~~ in the 1% AEP flood flow…
- the following amendment is proposed as it assists with the management of the flood hazard - b(iv) insert without exacerbating the flood hazard to other properties upstream or downstream of the site; and;

87. Additionally, the following amendments are proposed to INr.60C.3. This will assist with the consideration of the location of development.

- Include the functional and/or operational need to be located within the hazard area.
- Include the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

88. Refer to Appendix 10 for the proposed rule.

INr.60D Flood Areas except Flood Paths or Floodways – Network utility

89. Having considered the evidence of Andrew Criag and Matt Bonis particularly in relation to Permitted Activities, I only recommend the following amendment as this will assist with the clarity of the rule:

- the functional and/or operational need to be located within the hazard area; and

90. Refer to Appendix 11 for the proposed rule.

INr.60E Flood Areas except Flood Paths or Floodways – Earthworks

91. I have reviewed INr.60E.1 in relation to the NAL evidence. I consider that the following amendments to INr.60E.1 will assist with increasing Permitted activities in relation to earthworks

in Flood Areas except Flood Paths or Floodways. If the original ground level is restored at the completion of the works the flood behaviour will not be affected at the site. This amendment will in turn will assist with reducing the need to obtain a resource consent for many activities.

a) Insert excavation or in "a"

b) Add the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or

c) Add trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works

92. It will also allow work on existing above ground car parks or access ways for development that is not being undertaken by a network utility.

93. The addition of trenching as a Permitted activity is also considered a matter that would be of benefit to organisations that are not network utilities.

94. I suggest that the following amendment to the Matters of Discretion in INr.60E.3 will assist with the consideration of the location of development in hazard areas.

- the functional and/or operational need to be located within the hazard area; and
- the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

95. Refer to Appendix 12 for the proposed rule.

INr.60F Flood Areas except Flood Paths and Floodways – Flood mitigation and protection works

96. I consider that the inclusion of the definition of *minor upgrade* in the Meaning of Words addresses the matter of ambiguity raised in the evidence ((3.4(f)) of Andrew Craig:

> Minor upgrade
>
> Means an increase in the capacity, efficiency or security of existing infrastructure where this utilises existing structures and networks and/or structures and networks of a similar scale and character.

97. Additionally, in relation to INr.60F.3, I recommend that the following amendment will appropriately enable the consideration of National and/or Regionally Significant infrastructure, which I support for the reasons I have addressed in Issue 1 of the report.

> viii functional and/or operational need to be located within the hazard area.
> Ix the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

98. Refer to Appendix 13 for the proposed rule.

3.8.3 Recommendation

99. I recommend further amendments to the following flood related rules in the Industrial Zone and Meaning of Words.

Provision(s)	Officer recommendations
INr.60A.3 Flood Areas, except Flood Path or Floodway - Storage of a hazardous substance	• Insert as an additional Matter of Discretion the need to locate regionally significant infrastructure within the hazard area • Insert 'and' at the end of vii • Amend ii to the following: the functional and/or operational need to be located within the hazard area; and
INr.60B.1 Flood Areas, except any Flood Path or Floodway - Building and below ground swimming pools	Insert the amendment to INr.60B.1(d) as shown in Appendix 9.
INr.60B.3 Flood Areas, except any Flood Path or Floodway - Building and below ground swimming pools	Insert in INr.60B.3: • xiv and • xv the functional and/or operational need to be located within the hazard area; and • xvi the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.
INr.60C.1 except Flood Paths or Floodways – Fence, wall, retaining wall, outside storage	Insert or amend INr.60C.1 as follows: • in a new "a" a retaining wall is not greater than 1.2m in height and does not obstruct a flowpath or • in the current notified "a" fence~~,~~ or wall ~~or retaining wall~~ in the 1% AEP flood flow… • in the notified b(iv) insert without exacerbating the flood hazard to other properties upstream or downstream of the site; and ;
INr.60C.3 except Flood Paths or Floodways – Fence, wall, retaining wall, outside storage	Insert • stormwater management; and • The functional and/or operational need to be located within the hazard area; and .

	• the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.
INr.60D.3 Flood Areas except Flood Paths or Floodways – Network utility	Amend the following: the functional and/or operational need to be located within the hazard area; and
INr.60E.1 Flood Areas except Flood Paths or Floodways – Earthworks	Insert or add • Insert excavation or in "a" • Add "or" to the end of "b" • Add the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or • Add trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works
INr.60E.3 Flood Areas except Flood Paths or Floodways - Earthworks	Insert: • the functional and/or operational need to be located within the hazard area;and • the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.
Meaning of Words in relation to INr.60F Flood Areas except Flood Paths and Floodways – Flood mitigation and protection works	Minor upgrade Means an increase in the capacity, efficiency or security of existing infrastructure where this utilises existing structures and networks and/or structures and networks of a similar scale and character.
INr.60F.3 Flood Areas except Flood Paths and Floodways – Flood mitigation and protection works	Include the following: • vii stormwater management; and. • viii the functional and/or operational need to be located within the hazard area. • ix the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

3.8.4 S32AA Evaluation

100. The proposed amendments to the flood related rules in the Industrial zone seek to address the matters raised in the expert evidence. The amendments allow a wider range of Permitted activities and in some instances increased thresholds.

101. I consider that they effectively and efficiently achieves the PC29 natural hazard objective DO2.2 *Risks to Whakatū Nelson's people, property and infrastructure from natural hazards, including the effects of climate change, are recognised and managed and significant risk is avoided* and the associated policies:

- DO2.2.4 flood hazard: subdivision, use and development in flood areas
- DO2.2.5 flood hazard: building sand activities
- DO2.2.7 flood hazard: activities and development
- DO2.2.8 flood hazard: redevelopment

Costs/Benefits

102. The proposed amendments can reduce the need for a resource consent. This may lead to reduced time and financial costs to applicants and ratepayers.

Risk of acting or not acting

103. There are no risks as there is sufficient information.

Decision about most appropriate option

104. For the above reasons, the recommended amendments are considered to be more appropriate in than the notified version of PC29 in achieving the purpose of the RMA.

3.9 ISSUE 6 Flood overlays Manuka Street Hospital

3.9.1 Issues raised in submitter evidence

105. The evidence of Mark Lile (paragraph 113) and David Carlson-McColl (paragraphs 3-7) relating to Manuka Street Hospital concerns the Flood overlays pertaining to the Hospital lots NL60/201 Pt Sec 517 City of Nelson and NL60/202 Pt Sec 517 not the entire Manuka Hospital site.

106. The Joint Witness Statement (3.1(a)) records agreement between the flood experts.

107. The evidence of Damian Velluppillai's provides a map of the site (NL60/201 Pt Sec 517 City of Nelson and NL60/202 Pt Sec 517) showing the flood overlays. In his evidence Damian Velluppillai outlines his analysis of the flood overlays in relation to ground level data (LiDAR) based on the comments in David Carlson-McColl's evidence. Damian Velluppillai states that he agrees with David Carlson-McColl's evidence analysis.

3.9.2 Evaluation

108. Relying on the evidence of Damian Velluppillai's I support the removal of the PC29 Flood Hazard Overlay and PC29 High Flood Hazard Overlay from lots NL60/201 Pt Sec 517 City of Nelson and NL60/202 Pt Sec 517 as this will better reflect the existing ground level. This is consistent to the approach taken in the Section 42A Flood report concerning 100 Tasman Street.

3.9.3 Recommendation

109. I recommend the amendment to the Flood and High Flood Overlays described below.

Provision(s)	Officer recommendations
Flood and High Flood Overlays	Delete Flood and High Flood Overlays that intersect with NL60/201 Pt Sec 517 City of Nelson and NL60/202 Pt Sec 517.

3.9.4 S32AA Evaluation

110. The removal of the Flood and High Flood overlays from lots NL60/201 Pt Sec 517 City of Nelson and NL60/202 Pt Sec 517 City of Nelson will reflect the ground levels as they currently exist which now fall outside the Flood Hazard and Flood Hazard overlays, as confirmed by the latest LiDAR (2021).

4.0 Conclusion

111. The report has considered the expert evidence in relation to PC29 flood related matters. Following the expert conferencing that resulted in one Joint Witness Statement and further expert conferencing discussion (as outlined above), I have recommended amendments to some policies, rules and the High Flood and Flood Overlay in one instance.

5.0 Appendices

5.1 Appendix 1 DO2.2.4 flood hazard: subdivision, use and development in flood areas

Notified PC29 version	Section 42A Addendum version
Control subdivision, use and development within Flood Areas to ensure: 1. the type, frequency and scale of projected flooding, and likely damage and effects is appropriately assessed; 2. the building, land use or activity being proposed is suitable and its vulnerability to risk from the flood hazard is not increased; 3. significant risk to people, property, infrastructure and the natural environment, including social and cultural effects, from the flood hazard is avoided; 4. any adverse effects on the function of the floodplain, including flood storage capacity and conveyance are mitigated; 5. any adverse effects beyond the subject site including any exacerbation of, and transfer of, risk is appropriately managed; 6. building platforms are not located within land identified in the High Flood Hazard, Floodways, or Flood Paths; 7. the design, location, layout and construction of buildings and structures, including building platforms, ground/floor levels and adaptation methods provide resilience against and mitigate the projected effects of the flood hazard; 8. any adverse effects on infrastructure and access from flooding in a Flood Areas are mitigated; and 9. the storage and use of hazardous substances in relation to the flood hazard is appropriately managed.	Control subdivision, use and development within Flood Areas to ensure: 1. the type, frequency and scale of projected flooding, and likely damage and effects is appropriately assessed; and 2. the building, land use or activity being proposed is suitable and its vulnerability to risk from the flood hazard is not increased, or is appropriate having regard to the functional or operational need of the building, land use or activity within that location; and 3. significant risk to people, property, infrastructure and the natural environment, including social and cultural effects, from the flood hazard is avoided; and 4. any adverse effects on the function of the floodplain, including flood storage capacity and conveyance are mitigated; and 5. any adverse effects beyond the subject site including any exacerbation of, and transfer of, risk is appropriately managed; and 6. ~~building platforms are not located within land identified in the High Flood Hazard, Floodways, or Flood Paths;~~ 6. the design, location, layout and construction of buildings and structures, including building platforms, ground/floor levels and adaptation methods provide resilience against and mitigate the projected effects of the flood hazard; and 7. any adverse effects on infrastructure and access from flooding in ~~a~~ Flood Areas are mitigated; and 8. the storage and use of hazardous substances in relation to the flood hazard is appropriately managed.

5.2 Appendix 2 DO2.2.6 flood hazard: hard protection structures

Notified PC29 version	Section 42A Addendum version

DO2.2.6 flood hazard: hard protection structures Support the use of hard protection structures for flood mitigation purposes in preference to natural features and processes only where: 1. there is no natural defence option; 2. the hard protection structure does not create or exacerbate flooding upstream or downstream, or otherwise increase flood hazards or erosion; 3. the hard protection structure is located, designed, built and maintained to withstand natural processes and the effects of climate change; 4. significant adverse effects, including on the natural character and processes of the river and coastal environment, are avoided or mitigated.	**DO2.2.6 flood hazard: hard protection structures** Support the use of hard protection structures for flood mitigation purposes in preference to natural features and processes only where: 1. there is no practicable natural defence option and; 2. the hard protection structure does not create or exacerbate flooding upstream or downstream, or otherwise increase flood hazards or erosion and; 3. the hard protection structure is located, designed, built and maintained to withstand natural processes and the effects of climate change; and 4. Is appropriate having regard to the functional and/or operational need for Nationally and/or Regionally Significant Infrastructure to locate within Flood Areas; and 5. significant adverse effects, including on the natural character and processes of the river and coastal environment, are avoided or mitigated.

5.3 Appendix 3 DO2.2.10 high flood hazard, floodways and flood paths: subdivision, use and development, Explanations and Reasons

Notified PC29 version	Section 42A Addendum version
DO2.2.10 high flood hazard, floodways and flood paths: subdivision, use and development **Explanation and Reasons** DO2.2.10.i The areas of high flood flow and/or depth can cause harm to people and significant damage to buildings and infrastructure. Where possible the location of activities in these areas should be avoided. It is important that prior to development consideration is given to the flood hazard and measures are taken to reduce significant risk. Refer to Chapter 3 Administration for further information.	No amendment

5.4 Appendix 4 REr.83D.1 Flood Areas, except an Flood Path or Floodway, network utility

Notified PC29 version	Section 42A Addendum version
REr.83D.1 In Flood Areas, except any Flood Path or Floodway, a network utility is a permitted activity provided that it is: a. an underground network utility; or b. a network utility structure, including additions to an existing structure, up to 10m2 gross floor area (and where involving an addition, cumulatively over a 10 year period from the date of the notification of Plan Amendment no. 29) which does not exacerbate the flood hazard on-site, or upstream or downstream of the site, or c. maintenance, repair and construction of a private road or accessway in the 1% AEP floodplain that does not impede flood flows or exacerbate the flood hazard to other properties upstream or downstream of the site, or d. the construction, operation, maintenance, renewal or repair of a public road network located within the legal road, or the road formation width.	REr.83D.1 In Flood Areas, except any Flood Path or Floodway, a network utility is a permitted activity provided that it is: a. an aerial; or b. an underground network utility; or c. a network utility structure, including additions to an existing structure, up to 10m^2 gross floor area (and where involving an addition, cumulatively over a 10 year period from the date of the notification of Plan Amendment no. 29) which does not exacerbate the flood hazard on-site, or upstream or downstream of the site, or d. maintenance, repair and construction of a private road or accessway in the 1% AEP floodplain that does not impede flood flows or exacerbate the flood hazard to other properties upstream or downstream of the site, or e. the construction, operation, maintenance, renewal or repair of a public road network located within the legal road, or the road formation width.

5.5 Appendix 5 REr.59D.1 Flood Areas, except an Flood Path or Floodway, network utility

Notified PC29 version	Section 42A Addendum version
ICr.59D.1 In Flood Areas, except any Flood Path or Floodway, a network utility is a permitted activity provided that it is: a. an underground network utility; or b. a network utility structure, including additions to an existing structure, up to 10m^2 gross floor area (and where involving an addition, cumulatively over a 10 year period from the date of the notification of Plan Amendment no. 29 which does not exacerbate the flood hazard on-site, or upstream or downstream of the site, or c. maintenance, repair and construction of a private road or accessway in the 1% AEP floodplain that does not impede flood flows or exacerbate the flood hazard to other properties upstream or downstream of the site; or d. the construction, operation, maintenance, renewal or repair of a public road network located within the legal road, or the road formation width.	ICr.59D.1 In Flood Areas, except any Flood Path or Floodway, a network utility is a permitted activity provided that it is: a. an aerial; or b. an underground network utility; or c. a network utility structure, including additions to an existing structure, up to 10m^2 gross floor area (and where involving an addition, cumulatively over a 10 year period from the date of the notification of Plan Amendment no. 29 which does not exacerbate the flood hazard on-site, or upstream or downstream of the site, or d. maintenance, repair and construction of a private road or accessway in the 1% AEP floodplain that does not impede flood flows or exacerbate the flood hazard to other properties upstream or downstream of the site; or e. the construction, operation, maintenance, renewal or repair of a public road network located within the legal road, or the road formation width.

5.6 Appendix 6 REr.83E.1 Flood Areas except Flood Paths or Floodways - Earthworks

Notified PC29 version	Section 42A Addendum version
REr.83E.1 In Flood Areas, except any Flood Path or Floodway, earthworks are a permitted activity provided that the earthwork: a. is not more than $3m^3$ in each calendar year of cleanfill material per site; and has a maximum cumulative volume of filling and excavation of $25m^3$ per site, within any continuous period of 10 calendar years.	REr.83E.1 In Flood Areas, except any Flood Path or Floodway, earthworks are a permitted activity provided that the earthwork: a. is not more than $3m^3$ in each calendar year of excavation or cleanfill material per site; and b. has a maximum cumulative volume of filling and excavation of $25m^3$ per site, within any continuous period of 10 calendar years; or c. is for the installation of an aerial; or d. the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or e. trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works.

5.7 Appendix 7 ICr.59E.1 Flood Areas except Flood Paths or Floodways - Earthworks

Notified PC29 version	Section 42A Addendum version
ICr.59E.1 In Flood Areas, except any Flood Path or Floodway, earthworks are a permitted activity provided that the earthwork: a. is not more than $3m^3$ in each calendar year of cleanfill material per site; and b. has a maximum cumulative volume of filling and excavation of $25m^3$ per site, within any continuous period of 10 calendar years.	ICr.59E.1 In Flood Areas, except any Flood Path or Floodway, earthworks are a permitted activity provided that the earthwork: a. is not more than $3m^3$ in each calendar year of excavation or cleanfill material per site; and b. has a maximum cumulative volume of filling and excavation of $25m^3$ per site, within any continuous period of 10 calendar years; or c. is for the installation of an aerial; or d. the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or e. trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works.

5.8 Appendix 8 INr.60A Flood Areas, except Flood Path or Floodway, Storage of a hazardous substance

Notified PC29 version	Section 42A Addendum version
INr.60A.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. functional and/or operational need to locate within the hazard area; and iii. the location, design and management of facilities where hazardous substances are stored, used or disposed; and iv. the potential risk to people, property and the environment; and v. the potential contamination of water or land; and vi. any additional risk from coastal flooding; and vii. stormwater management	INr.60A.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. the functional and/or operational need to be located within the hazard area; and iii. the location, design and management of facilities where hazardous substances are stored, used or disposed; and iv. the potential risk to people, property and the environment; and v. the potential contamination of water or land; and vi. any additional risk from coastal flooding; and vii. stormwater management; and viii. the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

5.9 Appendix 9 INr.60B Flood Areas, except any Flood Path or Floodway Building and below ground swimming pools

Notified PC29 version	Section 42A Addendum version
INr.60B.1 In Flood Areas, except any Flood Path or Floodway a building activity is a permitted activity provided that it is: a. a below ground swimming pool that is not greater than 1m above the ground level; or b. maintenance, repair or alteration to a building which does not result in any increase to site coverage; or c. in the Flood Hazard Overlay or the Inundation Overlay, additions to an existing building, that: i. is up to 10m² gross floor area; and ii. all additions are up to 10m² gross floor area cumulatively over a 10 year period from the date of notification of the Plan Change; or d. in the High Flood Hazard Overlay, an addition to an existing building where: i. it is located above the flood flow levels; or ii. which does not occupy flood storage capacity or impede flood flows, as provided in statement issued by an experienced Chartered Professional Engineer practicing in flood hydrology; or e. a tent, marquee and other structure associated with a temporary event; or f. an open structure without a floor.	INr.60B.1 In Flood Areas, except any Flood Path or Floodway a building activity is a permitted activity provided that it is: a. a below ground swimming pool that is not greater than 1m above the ground level; or b. maintenance, repair or alteration to a building which does not result in any increase to site coverage; or c. in the Flood Hazard Overlay or the Inundation Overlay, additions to an existing building, that: i. is up to 10m² gross floor area; and ii. all additions are up to 10m² gross floor area cumulatively over a 10 year period from the date of notification of the Plan Change; or d. in the Flood Hazard or High Flood Hazard or Inundation Overlays, ~~an~~ additions to an existing building where a written statement is issued by a Chartered Engineer experienced in flood risk confirms that: i. ~~it is located above the flood flow levels; or~~ i. ~~which does not occupy flood storage capacity or impede flood flows, as provided in statement issued by an experienced Chartered Professional Engineer practicing in flood hydrology; or~~habitable floors are located above the 1% AEP flood level with a minimum of 0.5m freeboard; and ii. the additions do no impede flood flows so as to exacerbate the flood hazard to other properties upstream or downstream of the site; or g. a tent, marquee and other structure associated with a temporary event; or h. an open structure without a floor.

Notified PC29 version	Section 42A Addendum version
INr.60B.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to:	INr.60B.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to:

i. the nature of the flood event, including scale, location and frequency; and ii. floor and/or ground levels; and iii. building design and location within the site, including foundations and whether the building is readily relocatable; including the remediation of the site resulting from relocation; and iv. mitigation measures to address risk from the flood hazard; and v. risk to public health, safety and wellbeing and property from the flood hazard; and vi. the resilience to potential damage of the building from the effects of flood hazards (including water and debris); and vii. any exacerbated effects in relation to flooding on or off-site; and viii. the intended use of the building; and ix. access in a flood event, including ingress and egress; and x. ability to take an adaptive management approach; and xi. proposed evacuation plans; and xii. any additional risk from coastal flooding; and xiii. stormwater management; and the adverse effects of the works on the function and carrying capacity of natural systems	i. the nature of the flood event, including scale, location and frequency; and ii. floor and/or ground levels; and iii. building design and location within the site, including foundations and whether the building is readily relocatable; including the remediation of the site resulting from relocation; and iv. mitigation measures to address risk from the flood hazard; and v. risk to public health, safety and wellbeing and property from the flood hazard; and vi. the resilience to potential damage of the building from the effects of flood hazards (including water and debris); and vii. any exacerbated effects in relation to flooding on or off-site; and viii. the intended use of the building; and ix. access in a flood event, including ingress and egress; and x. ability to take an adaptive management approach; and xi. proposed evacuation plans; and xii. any additional risk from coastal flooding; and xiii. stormwater management; and xiv. the adverse effects of the works on the function and carrying capacity of natural systems; and xv. the functional and/or operational need to be located within the hazard area;and xvi. the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

5.10 Appendix 10 INr.60C except Flood Paths or Floodways – Fence, wall, retaining wall, outside storage

Notified PC29 version	Section 42A Addendum version
INr.60C.1 In Flood Areas except any Flood Path or Floodway a fence, wall, retaining wall, or outside storage is a permitted activity provided that: a. a fence, wall or retaining wall in the 1% AEP flood flow is designed to allow for the passage of flood waters; and b. the fence is constructed with: i. post and wire; or ii. wire mesh fences; or iii. railings where at least 70% of the surface area of the fence is not solid; or iv. solid fences and walls with an opening of sufficient size at flood level that can convey the 1% annual exceedance probability (AEP) flood flow; and c. the storage of goods and materials in the 1% AEP floodplain do not impede flood flows, and are contained and secured so as not to move in a flood event.	INr.60C.1 In Flood Areas except any Flood Path or Floodway a fence, wall, retaining wall, or outside storage is a permitted activity provided that: a. a retaining wall is not greater than 1.2m in height and does not obstruct a flowpath or b. a fence~~,~~ or wall ~~or retaining wall~~ in the 1% AEP flood flow is designed to allow for the passage of flood waters; and c. the fence is constructed with: i. post and wire; or ii. wire mesh fences; or iii. railings where at least 70% of the surface area of the fence is not solid; or iv. solid fences and walls with an opening of sufficient size at flood level that can convey the 1% annual exceedance probability (AEP) flood flow without exacerbating the flood hazard to other properties upstream or downstream of the site; and; d. the storage of goods and materials in the 1% AEP floodplain do not impede flood flows, and are contained and secured so as not to move in a flood event.

Notified PC29 version	Section 42A Addendum version
INr.60C.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event , including scale, location and frequency; and ii. the design of the fence, wall or retaining wall including the resilience to potential damage from the effects of flood hazards (including water and debris); and iii. the effects of potential changes in flood depth, velocity and frequency within the site and on adjoining sites, including upstream and downstream; and iv. the extent to which methods for long term maintenance of areas affected by flooding, such as easements, are provided; and	INr.60C.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event , including scale, location and frequency; and ii. the design of the fence, wall or retaining wall including the resilience to potential damage from the effects of flood hazards (including water and debris); and iii. the effects of potential changes in flood depth, velocity and frequency within the site and on adjoining sites, including upstream and downstream; and iv. the extent to which methods for long term maintenance of areas affected by flooding, such as easements, are provided; and

v. the effects of storage of outdoor goods and materials; and vi. any additional risk from coastal flooding; and vii. stormwater management.	v. the effects of storage of outdoor goods and materials; and vi. any additional risk from coastal flooding; and vii. stormwater management; and viii. the functional and/or operational need to be located within the hazard area; and . ix. the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

5.11 Appendix 11 INr.60D Flood Areas except Flood Paths or Floodways – Network utility

Notified PC29 version	Section 42A Addendum version
INr.60D.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. the functional and/or operational need to locate within the hazard area; and iii. the risk of adverse effects to other people, property, infrastructure and the natural environment including: a. public health and safety; and b. impacts on ecological values and values of significance to tangata whenua and public access associated with the proposed activity, including a need for flood protection works to be required to protect the utility; and iv. the level of existing investment (including supporting infrastructure) and ability to readily relocate uses; and v. any exacerbation of the hazard as a result of the structure; and vi. access in a flood event, including ability to maintain safe ingress and egress; and vii. proposed evacuation plans; and viii. ability to take an adaptive management approach; and ix. any additional risk from coastal flooding; and x. stormwater management.	INr.60D.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. the functional and/or operational need to be located within the hazard area; and iii. the risk of adverse effects to other people, property, infrastructure and the natural environment including: a. public health and safety; and b. impacts on ecological values and values of significance to tangata whenua and public access associated with the proposed activity, including a need for flood protection works to be required to protect the utility; and iv. the level of existing investment (including supporting infrastructure) and ability to readily relocate uses; and v. any exacerbation of the hazard as a result of the structure; and vi. access in a flood event, including ability to maintain safe ingress and egress; and vii. proposed evacuation plans; and viii. ability to take an adaptive management approach; and ix. any additional risk from coastal flooding; and x. stormwater management.

5.12 Appendix 12 INr.60E Flood Areas except Flood Paths or Floodways - Earthworks

Notified PC29 version	Section 42A Addendum version
INr.60E.1 In Flood Areas, except any Flood Path or Floodways, earthworks are a permitted activity provided that the earthworks: a. is not more than 3m³ in each calendar year of cleanfill material per site; and b. has a maximum cumulative volume of filling and excavation of 25m³ per site, within any continuous period of 10 years calendar years.	INr.60E.1 In Flood Areas, except any Flood Path or Floodways, earthworks are a permitted activity provided that the earthworks: a. is not more than 3m³ in each calendar year of excavation or cleanfill material per site; and b. has a maximum cumulative volume of filling and excavation of 25m³ per site, within any continuous period of 10 years; or c. the replacement of an above ground car park or accessway (including resealing) which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works; or d. trenching which on completion will have a finished contour that is equivalent to the original ground level at the commencement of the works

Notified PC29 version	Section 42A Addendum version
INr.60E.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. the displacement of flood waters beyond the site, exacerbation of the flood hazard and impact on the conveyance function of the flood plain; and iii. the nature of the activity associated with the earthworks to be located on any filled areas; and iv. mitigation measures to address risk from the flood hazard; and v. any additional risk from coastal flooding; and vi. stormwater management; and any adverse effects of the works on the function and carrying capacity of natural systems	INr.60E.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event, including scale, location and frequency; and ii. the displacement of flood waters beyond the site, exacerbation of the flood hazard and impact on the conveyance function of the flood plain; and iii. the nature of the activity associated with the earthworks to be located on any filled areas; and iv. mitigation measures to address risk from the flood hazard; and v. any additional risk from coastal flooding; and vi. stormwater management; and vii. any adverse effects of the works on the function and carrying capacity of natural systems; and viii. the functional and/or operational need to locate within the hazard area;and ix. the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.

5.13 Appendix 13 INr.60F Flood Areas except Flood Paths and Floodways – Flood mitigation and protection works

Notified PC29 version	Section 42A Addendum version
INr.60F.1 In Flood Areas, except any Flood Path or Floodway, the operation, maintenance, renewal, repair or minor infrastructure upgrade of existing land drainage works, stormwater management devices or flood mitigation works undertaken by a network utility operator is a permitted activity.	No proposed amendments

Notified PC29 version	Section 42A Addendum version
INr.60F.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event , including scale, location and frequency; and ii. the function of the device including the design in relation to the flood hazards; and iii. the potential mobilisation of accumulated contaminants; and iv. the adverse effects of the works on the function of natural systems, landscape values ecological values and amenity values; and v. social and economic effects including positive effects; and vi. residual risk; and vii. stormwater management.	INr.60F.3 Activities that contravene a permitted condition are restricted discretionary. Discretion is restricted to: i. the nature of the flood event , including scale, location and frequency; and ii. the function of the device including the design in relation to the flood hazards; and iii. the potential mobilisation of accumulated contaminants; and iv. the adverse effects of the works on the function of natural systems, landscape values ecological values and amenity values; and v. social and economic effects including positive effects; and vi. residual risk; and vii. stormwater management; and- viii. The functional and/or operational need to be located within the hazard area. ix. the need to locate Nationally and/or Regionally Significant Infrastructure within the hazard area.