

Memo

To:	Paul Ryan – Hamilton City Council		
From:	Robert Kelly – Tonkin + Taylor	Date:	15 May 2025
Subject:	Rotokauri Strategic Infrastructure Requirement – Technical Specialist Report for Section 42A Reporting		
Technical Area:	3-Waters		
Version:	Final		

Purpose

1. This memorandum has been prepared to provide technical assessment under section 42A of the Resource Management Act 1991 (RMA), in respect of 3-waters in relation to the Rotokauri Strategic Infrastructure Requirement (the Requirement).

Introduction

2. My name is Robert Kelly. I am a Senior Water Engineer with Tonkin + Taylor, based in the Tauranga office. I hold a Master of Engineering Science in water resources from the University of New South Wales. I am a Chartered Engineer and a practice area assessor for Engineering New Zealand. I am also a member of Water New Zealand.
3. I have over 20 years professional experience. I specialise in leading modelling projects and managing these from model build to options analysis to detailed design. These have included bridges, culverts, ponds, rail and road drainage, reticulation networks, and large rivers/lake systems. I have led the stormwater components on large land development projects and undertaken peer review for stormwater and modelling components for large transport projects. I have also led detailed optioneering for relieving flooding in existing urban areas.

Code of Conduct

4. I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this memorandum are within my area of expertise except where I state that I have relied on the advice of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

Scope

5. This memorandum covers the following:
 - a. The environmental effects on 3-waters of allowing the Requirement and whether any such adverse effects will be acceptable.

- b. Relevant matters raised, and relief sought, in submissions.
- c. Relevant statutory considerations, including whether the work is reasonably necessary for achieving the objectives of the Requiring Authority for which the designation is sought.
- d. Recommended modifications to the Requirement.
- e. Recommended amendments and/or additions to the Requiring Authority's proposed designation conditions.

Executive Summary

6. This memorandum provides a technical assessment under section 42A of the Resource Management Act (RMA), focusing on 3-waters aspects related to the Rotokauri Strategic Infrastructure Notice of Requirement (the Requirement). Following a review of pertinent documents, an on-site visit, and analysis of specific issues raised in submissions, I conclude that the work:
 - a. Is reasonably necessary for achieving the objectives of the Requiring Authority for which the designation is sought, and
 - b. Managed by appropriate designation conditions, including the new or modified conditions that I recommend below¹, or similar conditions, will have adverse effects on 3 Waters that are generally no more than minor.
7. I have the following concerns about the Requirement:
 - a. The Fast Track consented design for the Rotokauri Greenway (the Greenway) approved in July 2024 may change the Requirement.
 - b. The NOR lacks analysis of the following matters:
 - i. Climate change scenario Representative Concentration Pathway (RCP) 8.5,
 - ii. How stormwater effects will be mitigated in the Te Rapa catchment, and
 - iii. How volumetric effects of increased runoff volume will be mitigated in the Mangaheka catchment.
8. I have reviewed the submissions on 3-waters matters and recommended responses to them.
9. Finally, I recommend,² as a matter of good practice, continued information sharing between the Requiring Authority, land developers, and road design teams to support the integration of the design of stormwater, and other, infrastructure for the Requirement with that for surrounding properties.

Documents considered

10. The following documents have been considered in the preparation of this assessment:

¹ See paragraphs 82 and 83.

² See paragraphs 86 d ii and iii below.

- a. *Rotokauri Strategic Infrastructure Designation: Notice of Requirement: Final Report 19 September 2024: Prepared by Beca Limited for Hamilton City Council (the NOR).*
- b. Section 92 response letter (Part 1) dated 31 January 2024 from Melissa Slatter on behalf of the Requiring Authority.
- c. Section 92 response letter (Part 2) dated 24 April 2024 from Tony Denton on behalf of the Requiring Authority, updated NOR and Appendices A – O.
- d. The Submissions listed in Table 1.

Table 1 Submissions that raise 3-waters matters

Number	Submitter
3	Waikato Regional Council
4	Watson Lands Limited
6	Te Rapa Gateway Limited
7	Steve Godley & Adam Marsh
9	Steve Nuich, Sophia Anne Nuich, Gibson Nominees Limited, Ivan Selak
11	Te Kowhai East LP
13	Hounsell Holdings Ltd, Rotokauri Farming No3 Ltd and Hamilton JV (N3) Ltd
14	Rotokauri Development Limited
15	Pragma Holdings Limited
16	Phillip Ross Laird and Franklaw Trust Ltd

- e. Summary of submissions provided by Hamilton City Council (HCC).

Site visit

11. I visited the site on 31 October 2023. This involved a walkover at various accessible locations.

Analysis

Introduction

12. In my opinion, section 5 of the Design report (Appendix D of the NOR) provides a good analysis of the effects of the works on 3 - Waters matters.
13. I largely agree with and adopt that analysis for the purposes of this memorandum.

Gaps in the Design Report

14. However, the analysis in the Design Report does not include:
 - a. The latest Fast Track consented design (stormwater) approved in July 2024.
 - b. An analysis of climate change RCP 8.5 scenario.
 - c. An analysis of how volumetric effects of increased runoff volume will be mitigated for the Mangaheka catchment.

- d. Consideration of mitigation options for the adverse stormwater effects of the road upgrade/widening within the Te Rapa catchment.
15. These gaps are discussed as follows.
 16. The fast-track consented design is based on updated modelling for the Greenway. The Greenway is a 3.8km long corridor that will function as the principal stormwater management and drainage channel in the Rotokauri area. Wetland locations shown in the consented design are different from those shown in the NOR. Some of the former are outside of the designation for the subject NOR while areas of the proposed designation set aside for wetlands are no longer required. I recommend that the designation boundary is modified to align with the wetlands' concept design that is already consented through the fast-track process and which will be relied on to mitigate effects of the proposed roading works.
 17. The assumptions behind the stormwater design state that "future Design and consenting will need to consider the implications of flooding to climate change RCP 8.5". (RCP 8.5 is a very high baseline emissions scenario resulting in an increase in radiative forcing of 8.5 W/m² compared to pre-industrial conditions) It is industry best practice to consider RCP 8.5, if not always for design, then at least as a risk-based sensitivity test, especially for large scale new development areas such as this. This assessment can be delayed until the detailed design phase. However, if necessary, the Requiring Authority may need to seek an alteration to designation at that time to accommodate any enlarged culverts, open drains, or wetlands required for this climate change scenario.
 18. Mitigation of the Project's³ stormwater effects on the Te Rapa catchment and volumetric effects in the Mangaheka catchment will be determined during the detailed design stage and confirmed during the subsequent resource consent processes. While the effects in the Te Rapa catchment are minor and easily resolved, in my experience volumetric effects are often difficult to mitigate. The Requiring Authority may need to seek an alteration to designation at detailed design stage to accommodate additional run-off volume at source if it proves difficult to mitigate downstream volumetric effects in the Mangaheka catchment.

Environmental effects

19. The stormwater runoff from the proposed minor arterial roads has the potential to cause several adverse environmental effects. How the design treats these effects and whether they are mitigated by the design is discussed below.

Stormwater quality

20. The road has the potential to increase pollutant loading into the receiving streams, from car brakes and tyres and other vehicle discharges. A treatment train approach has been applied in the road design using raingardens and wetlands. The design has followed the recommendation for wetland design and pollutant capture set out in the respective Integrated Catchment Management Plans (ICMPs). This treatment approach is appropriate and should mitigate any adverse effects of the Project, once operational, on stormwater quality in the Rotokauri and Mangaheka catchments.

³ In this memorandum "the Project" means all the physical works, measures, and processes that are necessary to give effect to the NOR, including the measures to avoid, remedy, mitigate, minimise, offset, or compensate for, its actual or potential adverse environmental effects.

21. The portion of the road east of the railway is in the Te Rapa catchment and will make use of the existing drainage network. There is no stormwater quality treatment for this runoff from this portion of road widening/upgrade within the designation. HCC's preferred approach is for a sub-catchment scale wetland towards the downstream end of the catchment. Given the minor nature and extent of the proposed works within this catchment, I believe this approach is appropriate.

Stream erosion

22. Increased runoff from the impervious road surface in small frequent rainfall events has the potential to increase stream erosion in the receiving streams. Extended detention is being provided in the wetlands to mitigate these effects which is an appropriate industry standard approach.
23. The designation does not include any mitigation for the road widening in the Te Rapa catchment. It is my understanding these effects are to be dealt with by HCC on a catchment - wide basis in their implementation of the Te Rapa ICMP. Given the minor nature and extent of the proposed works within this catchment, I believe this approach is appropriate.

Flooding

24. In larger rainfall events, increased runoff from the impervious road surface can cause increased flooding downstream. This flooding can be caused either by increased peak flows or by increased total runoff volume. Attenuation is to be provided by the proposed wetlands in the Mangaheka catchment. In the Rotokauri catchment the NOR wetlands in conjunction with the greenway will mitigate peak flow effects.
25. Volumetric effects in the Rotokauri catchment are being dealt with under the Fast-Track consenting process for the Greenway, which is a necessary precursor for the minor arterial roads project.
26. The NOR identifies no Project-specific planned mitigation for the Project's downstream volumetric effects on the Mangaheka Stream⁴. The Requiring Authority will address these effects when it applies for the necessary resource consents it requires for the Project from the Waikato Regional Council (WRC). WRC has made a submission on this matter.
27. Flooding effects from the proposed works in the Te Rapa catchment are proposed to be dealt with by HCC on a catchment - wide basis through implementation of the Te Rapa ICMP.

Cross road drainage

28. The proposed road vertical alignment is generally above existing ground levels and has the potential to block existing drainage paths.
29. Blockage will be avoided, or its effects managed by providing culverts under the road, and keeping the road as low as is practicable at these locations to allow overflows in overdesign events.
30. Two submitters have concerns about Culvert 2 which are discussed in paragraphs 36 and 43 below.

⁴ Appendix D to the NOR section 5.6 p53, para 7

31. Another submitter (16) has concerns about the flooding of their property at 29 Burbush Road.
32. Stormwater plan CA-2403 notes that there is currently no culvert under Burbush Road for the existing drain just north of their property. The road alignment here is being raised about 1 m which could block off existing drainage that currently spills over the road. I recommend a new cross-culvert at this location to mitigate adverse effects.⁵

Impacts on ability to develop adjacent land

33. The design of the road and the associated stormwater infrastructure can have significant impacts on the way in which the adjacent land can be developed. For example, low points in the road may influence minimum levels for overland flow paths on adjacent subdivisions and hence the amount of fill required to raise building platforms above the overland flow path.
34. The Requiring Authority's stormwater designer has noted⁶ that road drainage is integrated with the adjacent subdivision as far as is practical, recognising that some adjacent areas have advanced development plans while other areas have no active plans. Given these uncertainties, the designer has tried to minimise adverse effects on the potential for development.
35. I recommend ongoing coordination between the Requiring Authority its road design team and landowners and developers to continue to minimise any effects.⁷

Matters raised in submissions

Submission 3 - WRC

36. WRC requests that it be consulted over diversion of stormwater into its drainage network and provisions made to address downstream effects such as increased flooding and erosion. WRC wants these provisions to include upgrading the downstream network to offset the identified effects.
37. While I agree that these downstream effects need to be addressed, mitigation measures should not be restricted to upgrading the downstream network and could include upstream volume or flow control.
38. Regardless of which approach is taken, this matter will be addressed when regional resource consents are sought.
39. WRC has also questioned the use of the road corridor as part of the flood conveyance system and asserts that the NOR includes no assessment of the future frequency and magnitude of such flows.
40. However, the Requiring Authority's design report⁸ states that the pipe network will be designed to convey the 10-Year Annual Recurrence Interval (10Y ARI) peak flows⁹, so overland flow will only occur in events larger than the 10Y ARI event.

⁵ See paragraph 83 below.

⁶ Appendix D to the NOR section 5.6 p52, para 5

⁷ See paragraphs 86 d ii and iii below.

⁸ Appendix D to the NOR

⁹ Appendix D to the NOR section 5.7.3 p57

41. The Requiring Authority confirmed in its section 92 response that the detailed design will need to comply with the Waikato Regional Infrastructure Technical Specifications (RITS) which state: “The design [of secondary flow on roads] must not result in ponding greater than 150mm deep and a velocity greater than 1m/s¹⁰.”
42. This is in accordance with industry standards and is an appropriate design standard. As such, this matter of overland flow does not need to be the subject of a designation condition.

Submission 4 - Watson Lands Limited

43. Watson Lands Limited (Submitter 4) requests that the NOR be rejected. One of the reasons given is that there is no justification for the stormwater requirement on their land including no rational[e] for its size. The stormwater requirement on the submitter’s land includes the development of wetland 7C which has been included in the NOR to meet the wetland volume requirements set out in the Mangaheka Integrated Catchment Management Plan (ICMP). I therefore do not agree with this justification for rejecting the NOR.

Submission 7 - Steve Godley & Adam Marsh

44. This submission states that the NOR land take area is fundamentally flawed. One of the reasons the submitter provides is that the NOR fails to acknowledge the Te Otamanui catchment which is separate to the Ohote catchment.
45. However, the NOR Design Report (section 5.2.2) states that stormwater runoff from the Designation in the Northern Development Area is not discharged to either the Ohote or Te Otamanui Streams. My inspection of the NOR design report stormwater design drawings has confirmed that this is correct.
46. The submission states that the NOR concept design does not align with the designs and levels for the Greenway which were approved under the Covid-Fast Track legislation.
47. I recommend that the Requiring Authority updates the NOR design to align with the consented fast track design and amend the NOR as necessary. I recommend that the designation boundary is modified to align with the wetlands’ concept design that is already consented through the fast-track process and which will be relied on to mitigate effects of the proposed roading works

Submission 9 - Steve Nuich, Sophia Anne Nuich, Gibson Nominees Limited, Ivan Selak

48. The submitters request that the north-south arterial be redesigned to accommodate the overland flow path from the Greenway to the Mangaheka Stream.
49. The NOR Design Report states that the overland flow path cannot be accommodated within the road corridor “due to limitations from the catchment boundary, pipe cover and the need for a low point above the Greenway culvert”¹¹.
50. It would be helpful if the Requiring Authority’s stormwater designers were to confirm these limitations through primary evidence.

¹⁰ Regional Infrastructure Technical Specification Section - (Waikato Local Authority Shared services (May 2018) section 4.2.3.4 p301.

¹¹ Appendix D to the NOR section 5.7.11 p67

51. It would also be helpful if the Requiring Authority were to clarify in primary evidence the status and interpretation of condition 42f of the Greenway (Designation A114) Conditions which relates to this overland flow path.
52. The submitters also request that the NOR design be reviewed in conjunction with the design of the Greenway and the evolving land development plans and designs of adjacent landowners. I am generally supportive of this collaborative and integrated approach being adopted during the detailed design phase, provided that there is no requirement for the detailed design to be acceptable to the submitters.

Submission 11 - Te Kowhai East LP

53. The submitter is generally in support of the NOR provided there is sufficient width in the roading corridor for future 3-Waters upgrades, there is 3-Waters coordination with the submitter's site, and any amendments required to achieve this are implemented by the Requiring Authority. I consider that the roading width is ample for any water and wastewater mains required. Stormwater is specifically addressed in the NOR design report and shown to be adequate. As a result, no specific additional designation conditions are required to satisfy this submission.

Submission 13 - Hounsell Holdings Ltd, Rotokauri Farming No3 Ltd and Hamilton JV (N3) Ltd

54. The submitter notes that parallel work under the fast-track process may have led to the road and flood level modelling and design within the NOR being superseded in part. An example is consented wetlands located outside of the proposed designation, while areas of the proposed designation set aside for wetlands are no longer required. The submitter seeks the two designs to be aligned.
55. It would be helpful if the Requiring Authority were to provide further information on the status of the parallel work streams to assist the hearing panel.

Submission 14 - Rotokauri Development Limited and Submission 15 - Pragma Holdings Limited

56. These submitters have very similar submissions.
57. Indicative future wetlands (to which the proposed road does not discharge) are included on the NOR drawings. The submitter seeks for these to be removed or, for clarity, to be labelled "Any indicative future wetlands are an indicative option for providing stormwater storage outside of the constructed Greenway. Each landowner will determine, design and consent the actual design, location and size of any additional stormwater storage device related to their property."
58. While I believe it is important to retain the indicative wetlands on the plans, so they do not get overlooked, I support including appropriate notes on the drawings to achieve clarity.
59. The term "indicative wetlands" is used on some drawings,¹² and a similar term, "potential future wetlands", is used on others.¹³

¹² Drawings 4288564-200-CA-2401 to 4288564-200-CA-2405 in Appendix B to the NOR

¹³ Drawings 4288564-200-CA-2601 to 4288564-200-CA-2604 and 4288564-CA-2701 to 4288564-CA-2707 in Appendix B to the NOR

60. I recommend below¹⁴ appropriate notes to be included on the relevant drawings.
61. The submitters also note that the low point of the road alignment over Culvert 2 will act as an overland flow path from their property and, as such, will drive required building platform levels on their property. They have asked for this low point to be kept as low as is practicable, which I support.
62. The submitters have concerns about whether the works will result in the blockage of natural drainage. The stormwater design drawings¹⁵ show that these natural drainage paths are diverted by temporary drains adjacent to the road which diverts them to Culvert 2, hence these natural flow paths will be altered but not blocked.
63. The submitters have asked for a condition to be added requiring the Requiring Authority to work collaboratively with the submitters prior to and during detailed design of Culvert 2 and specifically the level of the road at this location.
64. As these levels will determine finished ground levels required for the submitters' developments, I am therefore in general support of such collaboration.
65. However, the road design requirements may not always allow the outcomes desired by individual adjacent landowners to be achieved. I therefore recommend that the condition requires the Requiring Authority to consult with the submitters during the detailed design phase, but that there be no requirement for the detailed design to be acceptable to the submitters.¹⁶

Submission 16 - Phillip Ross Laird and Franklaw Trust Ltd

66. The submitter states that their property at 29 Burbush Road is low lying and already suffers from occasional flooding due to drains functioning poorly near their property. The submitter believes that, with a high-water table in the area, the proposed road is likely to increase water run-off and flooding on their land which, they state, already causes their septic tank to back-flow. This gives rise to health concerns.
67. However, my analysis shows that flooding impacts at the submitter's property will generally be reduced with the drain to the north-west of the property being diverted into wetland 6A improving drainage on the submitter's property¹⁷.
68. Currently there is no culvert under Burbush Road at the roading low point just to the north of the submitters' property. This has the potential to trap water on their property until the road overflows. The proposed works could exacerbate this effect, because they will raise the low point of Burbush Road by over a metre.
69. I therefore recommend that a culvert be placed in the location of the (raised) low point to allow any water not diverted to wetland 6A to escape under the newly raised Burbush Road.¹⁸
70. The submitter also has concerns about contaminants including, but not limited to, dust, polluting the rainwater collection, which is from roofs of buildings at the submitter's property.

¹⁴ See paragraphs 84 and 85.

¹⁵ Appendix B to the NOR - Design Plans: Drawing No 4288564-200-CA-2401 Rev H

¹⁶ See paragraphs 86 d ii and iii below.

¹⁷ Appendix B to the NOR - Design Plans: Drawing No 4288564-200-CA-2403 Rev H

¹⁸ See paragraph 83 below.

71. These effects can be managed using dust control measures.
72. I recommend that appropriate dust management conditions be included in the Designation Conditions.¹⁹

Statutory Considerations

73. I have reviewed the discussion in s9 of the NOR (pages 69 to 103) on the provisions in the statutory documents relating to 3-Waters that are listed below. I agree with the comments on those provisions. In my opinion, based on that analysis, the Requirement is consistent with those provisions.
 - a. RMA S168A (3) (a) policy statements and plans,
 - b. RMA S168A (3) (b) consideration of alternatives,
 - c. RMA S168A (3) (c) reasonably necessary for achieving objectives,
 - d. RMA – Section 5 – Purpose of RMA,
 - e. RMA – Section 5 – Matters of national Significance – public access to rivers and lakes,
 - f. RMA – section 7 – Other matters – maintenance and enhancement of the quality of the environment,
 - g. National Policy Statement for freshwater Management 2020,
 - h. National Environmental Standards for Freshwater 2020,
 - i. Waikato Regional Policy Statement – objectives 3.14 and 3.16, and
 - j. Hamilton District Plan – objectives 2.2 and 25.13.

Necessity of the works for achieving the objectives

74. Section 168A(3)(c) of the RMA requires an assessment as to whether the work is reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought.
75. HCC requires land to be designated in Hamilton City for the construction and operation of the 'Rotokauri Arterial Network'. This NOR is to:
 - a. Protect the land required to deliver key transportation and strategic infrastructure by HCC as the requiring authority,
 - b. Authorise the use of the land for the construction and operation of the infrastructure networks, and
 - c. Facilitate planned urban growth within the Rotokauri growth cell by identifying the network in the District Plan.
76. From a 3-Waters perspective the road corridor proposed contains sufficient width for trunk mains and stormwater conveyance. Additional land is also included in the designation for

¹⁹ See paragraph 86 c below.

wetlands. The sizing of the wetlands has been taken from the ICMPs and their supporting modelling.

77. Only wetlands that the Rotokauri Arterial Network discharges to are included in the designation. Other wetlands in the ICMPs that the roading does not discharge to are not included in the designation.
78. The size of the wetlands designated is far larger than required to treat stormwater from just the arterial network itself and have been sized to also treat the urban development that the arterial network enables. This is an appropriate methodology that has previously been successfully utilised by HCC (as Requiring Authority) in the Southern Links designation that provided for the establishment of arterial roading and 3-Waters infrastructure in the Peacocke Growth Area in the south of Hamilton.
79. While theoretically smaller wetlands treating just the stormwater from the road network could be designated and built initially and then expanded as urban development progresses, this is not a very coordinated or integrated approach.
80. I therefore believe, from a 3-waters perspective, that the extent of the work and the designation is reasonably necessary for achieving the objectives of the Requiring Authority.

Conclusions

81. In my opinion, from a three-waters management perspective, the proposed works for which designation is sought:
 - a. Are reasonably necessary for achieving the relevant objectives of the Requiring Authority for which the designation is sought, and
 - b. Managed by appropriate designation conditions, including the new or modified conditions that I recommend below, or similar conditions, will have adverse effects on 3-Waters that are at worst minor and comply with the relevant statutory requirements discussed above.

Recommendations

Modifications to the Requirement

82. Modify the designation boundary to align with the wetlands' concept design that is already consented through the fast-track process and which will be relied on to mitigate effects of the proposed roading works.
83. Install a culvert under the road just north of 27 Burbush Road to mitigate the potential for flooding on this property.
84. Add the following note to Drawings 4288564-200-CA-2401 to 4288564-200-CA-2405:

"Indicative future wetlands" means an indicative stormwater storage or treatment device required for a property. The landowner will determine its required size, design, and location and obtain the necessary consents for its construction and operation.
85. Add the following note to Drawings 4288564-200-CA-2601 to 4288564-200-CA-2604, and Drawings 4288564-CA-2701 to 4288564-CA-2707:

“Potential future wetlands” means an indicative stormwater storage or treatment device required for a property. The landowner will determine its required size, design, and location and obtain the necessary consents for its construction and operation.

Designation conditions

86. I recommend the following amendments and/or additions to the Requiring Authority’s proposed designation conditions²⁰:
- a. A new condition requiring the Greenway to be complete and operational prior to construction of any part of the roading infrastructure that will discharge to the Greenway, once completed, or to the Ohote Stream”. This is because the stormwater management for the roading relies on the Greenway.
 - b. New conditions requiring: “During Detailed Design, the Requiring Authority must:
 - i. Assess the effects of the works under the Representative Concentration Pathway 8.5 climate change scenario and identify any measures that will be implemented to avoid, remedy, or mitigate those effects where they create significant flood risk or hazard.²¹
 - ii. Assess the stormwater effects of any the works in the Te Rapa and Mangaheka catchments and identify any measures that will be implemented to avoid, remedy, or mitigate those effects.”²²
 - c. A new condition for dust management.²³
 - d. I support the following new conditions sought by submitters (I have struck through text that I do not agree with and underlined additional text I have introduced):
 - i. “Where diversion of stormwater into Waikato Regional Council managed drains is proposed in the future, Waikato Regional Council’s Integrated Catchment Management directorate shall be consulted and provisions shall be made to address downstream effects on the drainage network, such as increased flooding (magnitude and duration) and erosion. These adequate provisions must ~~include upgrading the downstream network to~~ offset the identified effects.”
 - ii. “The Requiring Authority shall ~~work collaboratively~~ consult with the owners of land adjacent to the ~~NOR~~ Designation to share information and integrate, as far as practicable, the design of the Rotokauri Strategic Infrastructure works with the Rotokauri Greenway design and construction and the available land development ~~and~~ designs of adjacent landowners.”
 - iii. “The Requiring Authority shall ~~work collaboratively~~ consult with the owners of Lot 4004 Deposited Plan 576817 and of Lot 2 Deposited Plan 12201 prior to and during the detailed design of Culvert 2, specifically in regard to the culvert invert level.”

²⁰ See s10 of the NOR.

²¹ See paragraph 17 above.

²² See paragraph 18 above.

²³ See paragraph 72 above.

Additional matters for the Requiring Authority to address in evidence

87. In my opinion, it would be helpful if the Requiring Authority were to address the following matters in primary evidence:
- a. Explain the limitations that mean the overland flow path between the Greenway and the Mangaheka Stream cannot be accommodated within the road corridor²⁴.
 - b. The status and interpretation of condition 42f of the Greenway (Designation A114) Conditions which relates to an overland flow path from the Greenway to Mangaheka Stream which is a matter raised in Submission 12²⁵.

15-May-25

[https://hccgovtnz.sharepoint.com/sites/districtplanreview/shared documents/notices of requirement/rotokauri strategic infrastructure/15_s42a report/specialists' assessments/tonkin & taylor/5 - paul ryan's review of final draft 2/memorandum - 3 waters_final draft2_rkel - p ryan edits 20250513.docx](https://hccgovtnz.sharepoint.com/sites/districtplanreview/shared%20documents/notices%20of%20requirement/rotokauri%20strategic%20infrastructure/15_s42a%20report/specialists'%20assessments/tonkin%20&%20taylor/5%20-%20paul%20ryan's%20review%20of%20final%20draft%202/memorandum%20-%203%20waters_final%20draft2_rkel%20-%20p%20ryan%20edits%2020250513.docx)

²⁴ See paragraph 50 above.

²⁵ See paragraph 51 above.